GUIDELINES FOR DESCRIPTIVE CATALOGING OF REPORTS

A revision of COSATI standard for descriptive cataloging of government scientific and technical reports.

AD-A160 409

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11. A revision of COSATI standard for descriptive cataloging of government scientific and technical reports.

12.

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GUIDELINES FOR
DESCRIPTIVE CATALOGING OF REPORTS

A Revision of COSATI Standard for
Descriptive Cataloging of
Government Scientific and Technical Reports

DTIC
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1985

COMMERCE, ENERGY, NASA, DEFENSE
INFORMATION (CENDI)
Cataloging Committee

Washington. D.C.

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COSATI guidelines for descriptive cataloging of technical reports have
been generally followed by the major federal information processing
agencies for almost 20 years. As revised in 1978* by the Committee on
Information Hang-Ups they have served to help standardize processing
and the building of the databases which serve as the basis for publications
and online systems. In order to increase the efficiency of report processing
operations throughout the Federal government, the CENDI** group has sponsored
a revision of the guidelines in light of modern procedures. Continuing
interagency working groups have been established to cooperate in implementing
the guidelines. Thus we are defining and streamlining exchange between
the agencies' information activities and assisting efforts to increase
R&D productivity by making it easier to use the systems.

Kurt Molholm, Administrator, DTIC

Van A. Wente, Chief, STIF, NASA

Joseph Caponio, Director, NTIS, DOC

Joseph Coyne, Manager, OSTI, DOE

*Guidelines for Descriptive Cataloging of Reports. A Revision of COSATI
Standard for Descriptive Cataloging of Government Scientific and Technical
Reports, Committee on Information Hang-Ups, Washington, D.C., March 1978
(CIH-78/01, PB-277 951, AD-A050 900).

**U.S. Department of Commerce, U.S. Department of Energy, National
Aeronautics and Space Administration, and U.S. Department of Defense.

ABSTRACT

Revised COSATI guidelines developed to maximize standardization of descriptive cataloging entries are defined. The rules presented govern the form of the essential cataloging elements for reports processed by the major federal information processing agencies: U.S. Department of Commerce, U.S. Department of Energy, National Aeronautics and Space Administration, and U.S. Department of Defense. The elements are: accession number, organization name, organization code, title (unclassified), subtitle or descriptive note, personal author, publication date, pagination (for printed documents), funding number, report number, availability, supplementar" note, and security classification. Additional elements of information and retrieval such as subject fields and groups, descriptors/subject terms, and abstract are also included within the scope of this standard. The guidelines are intended to provide users with a form of citation and index entries consistent within the products of the various nformation systems, and to facilitate the exchange of bibliographic information among the federal information processing agencies in the technical report literature field without costly duplicative effort, especially for machine-readable media.

The revised guidelines were developed to further standardize descriptive cataloging entries among federal information processing agencies. An interagency working group comprised of representatives from the four major federal information processing agencies was established to develop and implement these guidelines. The principle objectives of the working group are:

- to revise the COSATI standards, keeping in mind 17 core data elements common to all four agencies;
- to include subject fields and groups, descriptors/subject terms, and abstract data elements as part of the 17 core data elements;
- to identify new data elements, e.g., organization codes;
- to standardize data element tags for exchange of data on magnetic tape;
- to update the authority standards; and
- to update examples in the guidelines.

The rules developed govern the form of the essential descriptive cataloging data elements for technical report literature processed by the federal agencies.

Their purposes are:

- to provide rules for descriptive cataloging to assist federal information agencies to fulfill their processing requirements in the technical report literature field;
- to provide users with citation format and index entries consistent within the products of the various information systems;
- to enable federal information processing agencies to exchange descriptive cataloging entries on magnetic tape, thus avoiding duplicative effort; and
- to provide a guide to other organizations and institutions to formulate standard descriptive cataloging practices.

The guidelines are predicated on data fields which consider only the type of information such as organization name, personal author, title, etc.; this contrasts with library cataloging rules, which require a decision as to main entry. The guidelines proceed from general to specific, starting with the basic rules that underlie all other decisions, and proceeding to specific statements clarifying points about which there may be some doubt. Not all of these decisions will be relevant to all users; they are included to help solve problems which may exist in a specific collection. The extent to which a user conforms to or deviates from the guidelines will depend upon the constraints imposed by individual data processing systems and the amount of interchange the user has with other collections of similar materials.

v

Summary of descriptors used for each data element:

.1   DEFINITION: Consists of narrative defining the data element.

.2   PURPOSE: Indicates the reason for recording a particular data element.

.3   CONTENT: Indicates what is to be found in the data element in cataloging/indexing use. Includes rules for recording the data element, and special codes to be used, if applicable. Refers to authority lists, if applicable. Indicates any limitations imposed by the system such as field length limit, or number of occurrences limit.

.4   USE: Indicates to which of four possible categories the element is assigned (Mandatory – must be recorded, Optional – may be recorded, Mandatory if available – may not be found but must be recorded if present, and Required – by system functions, for example).

.5   EXTERNAL
     TAG: Records the exact content designation by which the data element is identified in magnetic tape formats.

.6   CHARACTER
     SET: Records the possible characters that may appear for the data element in a cataloging/indexing record in any specific system.

.7   DATA
     SOURCE: Indicates whether, in cataloging/indexing, the data element is found in the source document, is created by the agency staff, or is generated by algorithm or other automatic means, and whether it must be standardized to the agency system specification, whatever its source.

.8   NOTES: Indicates any miscellaneous information such as examples, special cases, exceptions to the rule, etc.

Interagency Working Group:

Elaine Burress, Defense Technical Information Center
            Department of Defense

Michael Streeks, Scientific and Technical Information Facility
            National Aeronautics and Space Administration

Asta Kane, National Technical Information Service
            Department of Commerce

Mary Hall, Office of Scientific & Technical Information
            Department of Energy

1.0 ACCESSION NUMBER

1.1 DEFINITION: A unique identification and control number.

1.2 PURPOSE: For report control and to serve as an order number.

1.3 CONTENT: Each processing system maintains its own numbering procedures: AD numbers are assigned by DTIC, DE numbers by DOE, N numbers by NASA, and PB numbers by NTIS.

The numbers may be newly assigned, may be the accession number assigned by another information center, or may be a number assigned by either the originating organization or the monitoring organization.

The ideal format includes the year imbedded in the number.

Examples:

DTIC, DOE, & NASA Announcement Format	NTIS Announcement Format
AD-A131 215	AD-A131 215/6
AD-B059 621	AD-B059 621/3
AD-D010 436	AD-D010 436/2
AD-P002 474	AD-P002 474/6
DE85023041 *	DE85023041 *
N85-29725 *	N85-29725/9 *
PB85-156779 *	PATENT-4 385 055
	PAT-APPL-6 511 689
	PB85-156779 *

* Shows the year embedded in the number

Examples of <u>other</u> accession numbers are:

AD-045456	NTIS/PS-77/0758/1
E75-10328	NTISUB/B/033-77/002
HRP-002686/9	NUREG/CR-3196
JPRS-54834	PAT-APPL-633 650
ED-126 957	SHR-0200401
	TT-75-59025
	PB-277 951

1.4 USE: Mandatory

1.5 EXTERNAL TAG: C01

1.6 CHARACTER SET: Standard ASCII characters

1.7 DATA SOURCE: Accession numbers may be assigned to a document by staff or
the computer, may be found on the document as assigned by another
information center, or in some cases may be derived from the document
report number.

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2.0 ORGANIZATION NAME(S)

2.1 DEFINITION: Names of the corporate bodies associated with the report. Two types of organizations are associated with reports: the corporate author, the institutional or corporate body preparing the report and performing or contractually responsible for the work; and the monitoring or funding agency, the organization responsible financially for the report or sponsoring the work, and controlling distribution of the report.

2.2 PURPOSE: To identify organizations associated with the report in a standard manner, thus to facilitate bringing together all reports generated or sponsored by a specific organization.

2.3 CONTENT: There are two distinct cataloging functions associated with an organization name. One, performed by cataloging staff wherever technical reports are processed, consists of adding appropriate names to a document citation. This is done by choosing from an authority list of organization names the numeric code(s) for the name(s). All codes that apply are recorded. Narrative entries of the names corresponding to the codes are generated automatically by computer.

The other function consists of formatting the narrative entry of the name for addition to the authority list. Maintenance of the authorities is the responsibility of the four CENDI agencies; preliminary entries may be submitted by other cataloging sites, to be verified by CENDI agencies before being added to an authority file. Rules for formatting these entries are given below. These rules are followed by the CENDI agencies and will assist other catalogers preparing tentative entries for CENDI review.

2.3.1 Selection of Elements of Organization Name Headings: General Rules

2.3.1.a

Only two organizational elements may be chosen. They are usually selected from the title page or the cover page of the report.

2.3.1.b

When two elements are chosen, they are the largest and the smallest elements; the city and state name of the smallest element follows the largest element of the organization heading.

APPEARS AS:	ENTER AS:
General Electric Co., Syracuse, NY, Tube Department. Imaging Devices Operation.	General Electric Co., Syracuse, NY. Imaging Devices Operation.

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2.3.1.c

   This selection of elements may vary if a smaller element includes a
   proper name (see 2.3.3.a); if a smaller name is the name of an
   independent company or a major government bureau of service (see
   2.3.3.b); or if the report series number assigned by the originator
   indicates a different level of editorial responsibility (see 2.3.3.c).

2.3.2   Selection Of Elements of Organization Name Headings: Specific Rules

2.3.2.a

   U.S. is omitted before government headings

   AFPEARS AS: ENTER AS:

   U.S. Coast Guard, Washington,   Coast Guard, Washington, DC.
   D.C.

   United States Geological Survey,   Geological Survey, Reston, VA.
   Reston, VA.

2.3.2.b

   City or state names which repeat part of the name of the main element
   are omitted.

   APPEARS AS: ENTER AS:

   Massachusetts Institute of   Massachusetts Inst. of Tech.,
   Technology, Cambridge, MA.   Cambridge.

   University of Rochester,   Rochester Univ., NY.
   Rochester, NY.

2.3.2.c

   If the subelement includes a geographic name, the geographic name is
   repeated as part of the subelement.

   APPEARS AS: ENTER AS:

   Burroughs Corporation, Radnor,   Burroughs Corp., Radnor, PA.
   PA, Radnor Division.   Radnor Div.

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2.3.2.d

State names are not abbreviated within a heading except when used as part of the place name.

APPEARS AS:	ENTER AS:
State University of New York at Albany.	State Univ. of New York at Albany.
University of Rochester, Rochester, New York.	Rochester Univ., NY.

2.3.2.e

Names of state and local government agencies should start with the names of the state or local government; words like "state", "city", "county" are included or omitted in acordance with local practice.

APPEARS AS:	ENTER AS:
Community Redevelopment Agency of the City of Los Angeles.	Los Angeles City Community Redevelopment Agency, CA.
County of Los Angeles, Department of Health Services, Los Angeles, CA.	Los Angeles County Dept. of Health Services, CA.
Department of Education, State of New York, Albany, New York.	New York State Dept. of Education, Albany.

2.3.2.f

The name "University of...(city or state)" is always written beginnin , with the city or state name, regardless of legal and financial rela- tionships; punctuation is not inserted in the inverted form (as is d-n. when cataloging according to AACR2).

APPEARS AS:	ENTER AS:
University of Pennsylvania, Philadelphia, Pennsylvania.	Pennsylvania Univ., Philadelphia.
The University of Alabama in Huntsville.	Alabama Univ. in Huntsville.
University of Wisconsin-Madison, Madison, Wisconsin.	Wisconsin Univ.-Madison.

2.3.2.g

The names "University of...(geographic region)" and "State University of..." are written without reversal.

APPEARS AS:	ENTER AS:
University of the South, Sewanee, TN.	University of the South, Sewanee, TN.

APPEARS AS:	ENTER AS:
State University of New York at Stony Brook, New York.	State Univ. of New York at Stony Brook.

2.3.2.h

Departments of universities are always written in the form "Dept. of ...", regardless of the way they appear on the report.

APPEARS AS:	ENTER AS:
University of Southern California, Los Angeles. Electrical Engineering Dept.	University of Southern California, Los Angeles. Dept. of Electrical Engineering.

2.3.2.i

Major committees of executive organizations are written following the names of the organization.

APPEARS AS:	ENTER AS:
Committee on Earthquake Engineering Research. Commission on Engineering and Technical Systems. National Research Council.	National Research Council, Washington, DC. Committee on Earthquake Engineering Research.

2.3.2.j

Joint committees are written directly under their own names.

APPEARS AS:	ENTER AS:
Congress of the United States, Joint Committee on Reduction of Federal Expenditures.	Joint Committee on Reduction of Federal Expenditures (U.S. Congress).

2.3.2.k

Abbreviations are not used as the first word of a heading, but are spelled out.

APPEARS AS:	ENTER AS:
AF Avionics Laboratory, Wright-Patterson Air Force Base, Ohio.	Air Force Avionics Lab., Wright-Patterson AFB, OH.

APPEARS AS:	ENTER AS:
St. Anthony Hospital, Columbus, Ohio.	Saint Anthony Hospital, Columbus, OH.
U.S. Steel Corporation, Monroeville, Pennsylvania.	United States Steel Corp., Monroeville, PA.

2.3.2.1

An exception is made only when the abbreviation is a legally or officially established element of the corporate title.

APPEARS AS:	ENTER AS:
RCA Corp., New York, N.Y. (legal name)	RCA Corp., New York.

2.3.2.m

If an organization customarily uses an abbreviated form of its official, legal, or chartered name, the abbreviated form is preferred.

APPEARS AS:	ENTER AS:
Alabama Agricultural and Mechanical University, Normal, AL.	Alabama A and M Univ., Normal.
Leland Stanford Junior University, Stanford, Calif.	Stanford Univ., CA.

2.3.2.n

If an organization changes its name, both old and new forms of the name are retained, with cross references made between them. (See Appendix 5). A specific report is cataloged under whichever name appears on the publication.

2.3.2.o

If a report is authored jointly by two or more components of the same organization, the heading should be no more specific than the smallest organizational level common to all components.

APPEARS AS:	ENTER AS:
General Electric Co., Cincinnati, Ohio. Flight Propulsion Division. Advanced Engine Technology Department and General Electric Co., Cincinnati, Ohio. Flight Propulsion Division. Large Jet Engine Department.	General Electric Co., Cincinatti, OH. Flight Propulsion Div.

2.3.2.p

When two companies are participating in a joint venture, the names are combined into a single source. The combination is usually found on the document.

APPEARS AS:	ENTER AS:
DeLeuw, Cather and Co. and STV, Inc. Washington, DC.	DeLeuw, Cather/STV, Washington, DC.

2.3.2.q

International unions or organizations which have no permanent headquarters may be written with no place name.

APPEARS AS:	ENTER AS:
International Association for Quaternary Research.	International Association for Quaternary Research.

2.3.2.r

If any of the following terms is written out on the document, it should be abbreviated within the corporate heading. (Authority: U.S. Government Printing Office Style Manual and foreign dictionaries)

Abteilung	Abt.
Air Force Base	AFB
Air Force Station	AFS
Aktiebolaget	A.B.
Aktiengesellschaft	A.G.
Aktieselskab	A/S
Anciens	Anc.
bij voorbeeld	B.V.
Boluk	Bl.
Brothers	Bros.
College	Coll.

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Campagnie	Cie.
Campania	Cia.
Company	Co.
Corporation	Corp.
Departement	Dept.
Department	Dept.
Departmental	Dept.
Departmentet	Dept.
Dipartimento	Dipt.
Divisao	Div.
Division	Div.
Divisione	Div.
eingetragner Verein	e.V.
Etablissements	Ets.
Geobroeders, Gebrueder	Gebr.
Gesellschaft mit beschraenkter Haftung	G.m.b.H.
Incorporated	Inc.
Ingenieur	Ing.
Institut	Inst.
Institute	Inst.
Institute of Technology	Inst. of Tech.
Institutet	Inst.
Instituto	Inst.
Institutt	Inst.
Institutul	Inst.
Instituut	Inst.
Instytut	Inst.
Istituto	Ist.
Kommanditgesellschaft	K.G.
Kommanditselskab	K/S
Laboratoire	Lab.
Laboratoires	Labs.
Laboratories	Labs.
Laboratoriet	Lab.
Laboratorio	Lab.
Laboratorium	Lab.
Laboratory	Lab.
Limited	Ltd.
Maatschappij	Mij.
Manufacturer	Mfr.
Manufacturers	Mfrs.
Manufacturing	Mfg.
Naamloze Vennootschap	N.V.
Offene Handlesgesellschaft	O.H.G.
Professional Corp.	P.C.
Private or (P)	Pvt.
Proprietary	Pty.
Public Limited Co.	PLC
Societa per Azioni	S.p.A.
Societe Anonyme	S.A
Societe a Responsabilite Limitee	S.R.L.
spolka	s-ka
Universidad	Univ.

2.3.2.r (cont.)

Universidade	Univ.
Universita	Univ.
Universitaet	Univ.
Universitas	Univ.
Universitatea	Univ.
Universite	Jniv.
Universiteit	Univ.
Universitet	Univ.
Universitetet	Univ.
Universiti	Univ.
University	Univ.
Univerzita	Univ.
Univerzitet	Univ.
Uniwersytet	Univ.
Volkseigner Betribe	VEB.

NOTE: This rule does not restrict the use of abbreviations that occur on the document.

2.3.2.s

The following abbreviations are used for U S geographic names when used as part of the geographic location; the abbreviations are taken from the <u>National ZIP Code Directory</u>.

Alabama — AL	Maine — ME
Alaska — AK	Maryland — MD
American Samoa — AS	Massachusetts — MA
Arizona — AZ	Michigan — MI
Arkansas — AR	Minnesota — MN
California — CA	Mississippi — MS
Canal Zone — CZ	Missouri — MO
Colorado — CO	Montana — MT
Connecticut — CT	Nebraska — NE
Delaware — DE	Nevada — NV
District of Columbia — DC	New Hampshire — NH
Florida — FL	New Jersey — NJ
Georgia — GA	New Mexico — NM
Guam — GU	New York — NY
Hawaii — HI	North Carolina — NC
Idaho — ID	North Dakota — ND
Illinois — IL	Ohio — OH
Indiana — IN	Oklahoma — OK
Iowa —IA	Oregon — OR
Kansas — KS	Pennsylvania — PA
Kentucky — K	Puerto Rico — PR
Louisiana — LA	Rhode Island — RI

2.3.2.s (cont.)

South Carolina - SC	Virgin Islands - VI
South Dakota - SD	Virginia - VA
Tennessee - TN	Washington - WA
Texas - TX	West Virginia - WV
Trust Territories - TT	Wisconsin - WI
Utah - UT	Wyoming - WY
Vermont - VT	

2.3.2.t

The _Directory_ is also used to establish the correct form of the place name in cases of doubt. If a branch post office has a ZIP code different from that of the main post office, the name of the branch post office is used.

APPEARS AS:

Argonne National Lab., Lemont, IL.

ENTER AS:

Argonne National Lab., IL. (since Argonne is a substation of Lemont but has its own ZIP code)

2.3.2.u

For military installations, the post office as given in the _Directory_ is used.

APPEARS AS:

Wright-Patterson Air Force Base, Ohio.

Andrews Air Force Base, Maryland.

ENTER AS:

Wright-Patterson AFB, OH.

Andrews AFB, Washington, DC.

2.3.2.v

For Fleet and Army Post Offices, military forms are used; include the abbreviation "APO" or "FPO" and the ZIP code, but omit the state name.

APPEARS AS:

Army Research Institute Field Unit, APO New York 09403.

Naval Medical Research Unit No. 3, FPO New York 09527.

ENTER AS:

Army Research Inst. Field Unit, APO New York 09403.

Naval Medical Research Unit No. 3, FPO New York 09527.

2.3.3 Selection of Elements of Organization Name Headings: Exceptions

2.3.3.a

Proper names - A smaller organization element that begins with a proper name is selected as the secondary or subelement, ignoring other smaller elements in the imprint. Proper names include a noun not defined in the dictionary, the name of a person, part of the name of a company repeated in the name of the component, an acronymic form of name, and geographic names.

APPEARS AS:	ENTER AS:
Johns Hopkins Univ., Baltimore, MD. Dept. of Physics, Carlyle Barton Lab.	Johns Hopkins Univ., Baltimore, MD. Carlyle Barton Lab.
General Motors Technical Center, Warren, MI. GM Transportation Systems Center.	General Motors Technical Center, Warren, MI. GM Transportation Systems Center.
Department of Energy, Pittsburgh, PA. Pittsburgh Mining Technology Center. Division of Fossil Fuel Extraction.	Department of Energy, Pittsburgh, PA. Pittsburgh Mining Technology Center.

2.3.3.a(1)

If there are two subordinate elements, one showing a proper name and one showing a report series, the subelement element represented by the report series is chosen.

APPEARS AS:	ENTER AS:
Report Number LBL-801 and California Univ., Berkeley, Dept. of Physics. and California Univ., Berkeley. Lawrence Berkeley Lab.	California Univ., Berkeley. Lawrence Berkeley Lab.

2.3.3.a(2)

If the first element of a heading begins with initials of a personal name, the entry is started with the surname, followed by initials enclosed in parentheses.

APPEARS AS:	ENTER AS:
E.I. Du Pont de Nemours and Co., Wilmington, DE.	Du Pont de Nemours (E.I) and Co., Wilmington, DE.
B.F. Goodrich Co., Akron, OH.	Goodrich (B.F.) Co., Akron, OH.

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2.3.3.a(3)

If the first element of a heading begins with a personal forename, and it is the name of a company or other commercial/industrial organization (including Associates, Engineers, etc.), the heading starts with the surname, followed by forename and initials enclosed in parentheses.

APPEARS AS: ENTER AS:

Arthur D. Little, Inc., Cambridge,   Little (Arthur D.), Inc.,
MA.   Cambridge, MA.

2.3.3.a(4)

If the first element of a heading begins with a personal forename, and is the name of a university, laboratory, institute, center, hospital, foundation or other apparently non-commercial organization, the heading is written directly as given.

APPEARS AS: ENTER AS:

M.D. Anderson Hospital and Tumor   M.D. Anderson Hospital and
Institute, Houston, TX.   Tumor Inst., Houston, TX.

Harry Diamond Laboratories,   Harry Diamond Labs.,
Washington, DC.   Washington, DC.

2.3.3.a(5)

If the subordinate element of a heading begins with a personal name, that name is written without rearrangement.

APPEARS AS: ENTER AS:

California Institute of Technology,   California Inst. of Tech.,
Pasadena, CA. W. M. Keck Laboratory   Pasadena. W.M. Keck Lab. of
of Engineering Materials.   Engineering Materials.

2.3.3.a(6)

A subordinate element that begins with the words U.S., National, or the state name in a state organization, is entered as an independent organization.

APPEARS AS: ENTER AS:

U.S. Army Engineer District,   Army Engineer District,
Huntington. Corps of Engineers,   Huntington, WV.
Huntington, WV.

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2.3.3.a(6) (cont.)

APPEARS AS:	ENTER AS:
Hawaii Institute of Geophysics, University of Hawaii, Honolulu, Hawaii.	Hawaii Inst. of Geophysics, Honolulu.
National Magnet Laboratory, Massachusetts Institute of Technology, Cambridge, MA.	National Magnet Lab., Cambridge, MA.

2.3.3.b

Independent names — A subordinate element of a company is recognizable as an independent corporate entity by words such as Inc., Co., Ltd., Corp., etc., or by the fact that descriptive phrases such as "a division of ...", "a subsidiary of ...", are not included within the name itself. Such an independent element is written as a single-element heading with place name, omitting the name of the largest element. The heading is followed by the name of a still smaller organization element where such is included in the imprint.

APPEARS AS:	ENTER AS:
Babcock and Wilcox, A McDermott Company, New Orleans, LA.	Babcock and Wilcox, New Orleans, LA.

2.3.3.b(1)

Major bureaus and services of the U.S. Government are listed as one-element headings, omitting the larger organizational element.

APPEARS AS:	ENTER AS:
Department of Health and Human Services, Public Health Service, Rockville, MD.	Public Health Service, Rockville, MD.

Any such heading may be followed by the name of the smallest element.

APPEARS AS:	ENTER AS:
Department of Agriculture, Agricultural Research Service, Beltsville, MD. Plant Stress Laboratory.	Agricultural Research Service, Beltsville, MD. Plant Stress Lab.

2.3.3.b(2)

Parenthetical identification is added when necessary.

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2.3.3.b(2) (cont.)

APPEARS AS:	ENTER AS:
Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, Washington, DC.	Office of Assistant Secretary for Planning and Evaluation (HHS), Washington, DC.
Department of the Navy, Bureau of Medicine and Surgery, Washington, DC.	Bureau of Medicine and Surgery (Navy), Washington, DC.
Department of the Army, Adjutant General's Office, Washington, DC.	Adjutant General's Office (Army), Washington, DC.
Department of the Army, 7th Infantry Fort Ord, CA.	Infantry Div. (7th), Fort Ord, CA.

2.3.3.b(3)

Named observatories are written as independent headings.

APPEARS AS:	ENTER AS:
Chicago University, Williams Bay, WI. Yerkes Observatory.	Yerkes Observatory, Williams Bay, WI.

2.3.3.b(4)

If a college or school of a university has a proper name, it is written as an independent heading.

APPEARS AS:	ENTER AS:
Cambridge University, Cambridge, England. Trinity College.	Trinity Coll., Cambridge (England).
Virginia University, Fredericksburg, VA. Mary Washington College.	Mary Washington Coll., Fredericksburg, VA.
Pennsylvania University, Philadelphia, PA. The Wharton School.	Wharton School, Philadelphia, PA.

2.3.3.b(5)

If an independent element of a government agency is a laboratory, center, or institute, no further subdivision is used.

APPEARS AS:	ENTER AS:
Armed Forces Institute of Pathology, Washington, DC. Geographic Pathology Div.	Armed Forces Inst. of Pathology, Washington, DC.

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unless the subordinate element is also represented by a report series.

APPEARS AS:	ENTER AS:
NAPTC-ATD-216 (report series) and Naval Air Propulsion Test Center, Trenton, NJ. Aeronautical Turbine Dept.	Naval Air Propulsion Test Center, Trenton, NJ. Aeronautical Turbine Dept.

2.3.3.b(6)

If a report series acronym indicates the editorial responsibility of a subordinate element of a government agency, that element is considered to be independent and no further elements are included.

APPEARS AS:	ENTER AS:
ASD/TR-83/5014 (report series) and Flight Accessories Laboratories, Aeronautical Systems Division, Air Force Systems Command, United States Air Force, Wright-Patterson Air Force Base, Ohio.	Aeronautical Systems Div., Wright-Patterson AFB, OH.

Include the subordinate element if it is also represented by a report series.

APPEARS AS:	ENTER AS:
TR-66-2-CM (report series) and C&OM-15 (report series) and Army Natick Laboratories, Natick, MA. Clothing and Organic Materials Division.	Army Natick Labs., MA. Clothing and Organic Materials Div.

NOTE: For report series in <u>non-government</u> agency reports, see 2.3.3.c, below.

2.3.3.c

Report series - Many reports include a report series number which indicates the level of organizational and editorial responsibility. Most of these report series include an acronym which can be readily related to one or more of the organizational elements listed in the imprint. For smaller organizational elements, that element indicated by the report series is chosen.

2.3.3.c (cont.)

APPEARS AS: ENTER AS:

ESG-84-01 (report series)   Rockwell International, Canoga
          and   Park, CA. Energy Systems
Rockwell International, Canoga Park,   Group.
California. Environmental and Energy
Systems Division. Energy Systems Group.

NOTE: For report series in <u>government</u> agency reports, see 2.3.3.b(5)
and (6) above.

If the report series indicates a larger-smaller order of responsibility,
that order is followed in the corporate author heading, selecting the
two elements indicated by the report series and ignoring any other
elements.

APPEARS AS: ENTER AS:

NIOSH/IHS-81-15 (report series)   National Inst. of Occupational
          and   Safety and Health, Cincinnati,
Industrial Hygiene Section.   OH. Industrial Hygiene
Industry-Wide Studies Branch.   Section.
Division of Surveillance, Hazard
Evaluations and Field Studies.
National Institute of Occupational
Safety and Health, Cincinnati, Ohio.

2.3.4   Selection of Elements of Organization Name Headings: Foreign
        Organization Name Headings

2.3.4.a

The name of a foreign corporate body is entered as name of the
organization, followed by the name of the city, followed by the name of
the country written in parentheses. (See Appendix 2 for a list of
geographic names to be used.)

APPEARS AS: ENTER AS:

Royal Aircraft Establishment,   Royal Aircraft Establishment,
Farnborough, England.   Farnborough (England).

2.3.4.b

Foreign names are written in the native language, or transliterated
from the native language whenever the native form of the name is known.

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2.3.4.b (cont.)

APPEARS AS:	ENTER AS:
Societa Richerche Impianti Nucleari, Milano.	Societa Richerche Impianti Nucleari, Milan (Italy).

But if the foreign institution chooses to publish all its reports in English under an English form of organization name, or if the official publications of an institution include the organization name given in English, the English form is used.

APPEARS AS:	ENTER AS:
Technical University of Denmark, Lyngby.	Technical Univ. of Denmark, Lyngby.
Forsvarets Forskningsinstitutt, Kjeller, Norway and Norwegian Defence Research Establishment, Kjeller.	Norwegian Defence Research Establishment, Kjeller.

2.3.4.c

Names of foreign cities are not abbreviated; names of foreign countries are not abbreviated except for the following countries:
(See Appendix 2.)

> Germany, F.R.
> German D.R.
> Korea, D.P.R.
> USSR.

The name of the country is not repeated if included in the heading.

APPEARS AS:	ENTER AS:
Australian National University, Canberra, Australia.	Australian National Univ., Canberra.
Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro, Brazil.	Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro.

2.3.4.d

Foreign place names are written in the form of common usage as indicated by the Board on Geographic Names—Defense Mapping Agency.

2.3.4.d (cont.)

APPEARS AS:	ENTER AS:
Universita di Milano, Italia.	Milan Univ. (Italy).

When the name forms an integral part of the heading, retain the native form.

APPEARS AS:	ENTER AS:
Politecnico di Milano, Italia.	Politecnico di Milano (Italy).

2.3.4.e

If the name of the university begins with the foreign equivalent of "University of ... (place name)," the place name is written first and the foreign form of "university" is abbreviated to "Univ."

APPEARS AS:	ENTER AS:
Universidad de Barcelona, Spain.	Barcelona Univ. (Spain).
Universidade do Brasil, Rio de Janeiro.	Brazil Univ., Rio de Janeiro.
Universita degli Studi, Parma, Italy.	Parma Univ. (Italy).
Universitaet Wien, Austria.	Vienna Univ. (Austria).

2.3.4.f

If a foreign university commonly prefers the "University of (place name)" to the official version of its name, the place name version should be used.

APPEARS AS:	ENTER AS:
Universitaet Kiel, Germany, F.R. and Christian-Albrechts Universitaet Kiel, Germany, F.R.	Kiel Univ. (Germany, F.R.).

2.3.4.g

Technische Universitaet is written using the common form of place name and omitting the formal portion of the name.

APPEARS AS:	ENTER AS:
Technishche Universitaet Carolo Wilhelmina zu Braunschweig, Germany, F.R.	Technische Univ., Brunswick (Germany, F.R.).

2.3.4.h

All other forms of name are retained as written.

APPEARS AS: ENTER AS:

Pontificia Universidade Catolica do   Pontificia Univ. Catolica do
Rio de Janeiro, Brazil.   Rio de Janeiro (Brazil).

2.3.4.i

Foreign scientific academies are written as the name of the academy,
followed by place and country. (Name of country is omitted when
included in the name of the academy).

APPEARS AS: ENTER AS:

Akademiya Nauk SSSR, Moscow, USSR.   Akademiya Nauk SSSR, Moscow.

2.3.4.j

Institutes, sections, etc. of foreign academies are written following
the name of the academy, place and country. If an institute name from a
Russian or satellite country is followed by a personal name, omit the
personal name.

APPEARS AS: ENTER AS:

Akademiya Nauk SSSR, Leningrad, USSR.   Akademiya Nauk SSSR,
Fiziko-Tekhnicheskii Institut im. A.F.   Leningrad. Fiziko-
Ioffe.   Tekhnicheskii Inst.

2.3.4.k

All other foreign institutes, not connected with their national
academies, are written directly.

APPEARS AS: ENTER AS:

Institute Hygieny a Epidemiologie,   Institut Hygieny a
Prague, Czechoslovakia.   Epidemiologie, Prague
                                            (Czechoslovakia).

2.4 USE: Mandatory

2.5 EXTERNAL TAG: C05

2.6 CHARACTER SET: Standard ASCII Characters

2.7 DATA SOURCE: Organizations are taken from the document, following
     conventions listed above. An authority file is used for standardization.

2.8 NOTES: Narrative entries follow standard formats and transliteration schemes, particularly FIPS PUB 10-3: Countries, Dependencies, Areas of Special Sovereignty, and their Principal Administrative Divisions, (1984)*; ANSI Z39.24-1976, System for Romanization of Slavic Cyrillic Characters**; and the National ZIP Code Directory.

*Copies of FIPS PUBs referenced in these Guidelines are available from NTIS, 5285 Port Royal Road, Springfield, VA 22161.

**Copies of ANSI standards referenced in these Guidelines are available from American National Standards Institute, 1430 Broadway, New York, NY 10018.

3.0 ORGANIZATION CODES

3.1 DEFINITION: Numeric codes representing names of performing organizations and sponsoring or monitoring organizations, assigned and maintained in authority files by the CENDI agencies.

3.2 PURPOSE: To permit machine-generation of the narrative entries for Organization Names in a standard manner.

3.3 CONTENT: All codes that apply are recorded. Numeric codes are assigned from standard code authority lists; the lists now maintained at each agency are being consolidated into a single file at NTIS, to be available online to other agencies.

3.4 USE: Mandatory

3.5 EXTERNAL TAG: C06

3.6 CHARACTER SET: Standard ASCII characters.

3.7 DATA SOURCE: Organization codes are taken from an authority list, based on identification of the organizations' names following the conventions outlined in 2.0 ORGANIZATION NAME(S).

3.8 NOTES: See Notes 2.8, page 21.

4.0 TITLE (UNCLASSIFIED)

4.1 DEFINITION: Name of the unclassified work, including two-part title and alternative title.

4.2 PURPOSE: To provide a name that identifies and describes a report.

4.3 CONTENT: A title is taken from the part of the report that provides the most meaningful and complete title information, e.g., a cover, title page or report documentation page. If a title is not available from these sources, a source within the report is used to provide the most complete and meaningful title, i.e., caption, running title, etc. Every part of the title is entered as it appears on the report.

4.3.1 If a title includes a volume number, part number, change number or a generic report type, that information is recorded. (See also 5.0 SUBTITLE OR DESCRIPTIVE NOTE).

APPEARS AS:	ENTER AS:
War Gaming System. Vol. 2 Weaponry Manual. Change 5.	War Gaming System. Vol. 2 Weaponry Manual. Change 5.

4.3.2 The Government Printing Office Style Manual is used as the punctuation/verbalization authority. To verbalize titles for machinability, see Appendix 4.

4 3.3 Exceptions to these rules are:

4.3.3.a

Word order is transposed when the title begins with the report type (Quarterly, Progress, Interim, etc.).

APPEARS AS:	ENTER AS:
Quarterly Progress Report No. 4 on Nuclear Batteries for Jan. 30-Apr. 30, 1984.	Nuclear Batteries. (See also 5.0. SUBTITLE OR DESCRIPTIVE NOTE)
	or
	Nuclear Batteries. Quarterly Progress Report No. 4, Jan 30-Apr 30, 1984.

4.3.3.b

Arabic numerals are used in place of Roman numerals.

4.3.3.c

The title of conferences and proceedings should have the number of the conference recorded in parentheses after the name. The words "Held in" and "on" should be added to the title to indicate the place and date of the conference.

APPEARS AS:	ENTER AS:
Sixth Army Human Factors Engineering Conference, Chicago, Illinois, on October 4, 5, and 6, 1984.	Army Human Factors Engineering Conference (6th). Held in Chicago, Illinois on October 4, 5, and 6, 1984.

4.3.3.d

Documents in a group may display a series or collective title in addition to their own titles, which indicates that the individual report is part of a general collection; the series title usually refers to the subject of the collection. It should be entered, followed by a period, then the title of the specific report.

APPEARS AS:	ENTER AS:
MATERNITY CARE FOR THE POOR Measuring the Success of the MIC Project in Rural Florida.	Maternity Care for the Poor. Measuring the Success of the MIC (Maternity and Infant Care) Project in Rural Florida.

4.3.3.e

When a document text is written in a foreign language and the title is given in both the foreign language and in English, the title should be entered in the foreign language first followed by the English version in parentheses. When no English title is given, the foreign title should be translated, if possible.

4.3.3.f

Meaningless titles should be modified with meaningful words/phrases; acronyms should be spelled out. All generated information should be set off by parentheses.

APPEARS AS:	ENTER AS:
Handbook.	Handbook (for a Personnel Specialist on Navy Housing Regulations).

4.3.3.f (cont.)

APPEARS AS:	ENTER AS:
DTIC Cataloging Guidelines.	DTIC (Defense Technical Information Center) Cataloging Guidelines.

(See also example under 4.3.3.d above)

4.4 USE: Mandatory

4.5 EXTERNAL TAC: C03

4.6 CHARACTER SET: Standard ASCII characters

4.7 DATA SOURCE: The title is taken from the report following conventions listed above.

4.8 NOTES: Some cataloging organizations may add information about the type of report to the title; some agencies use other title fields to record this information. In the latter cases, refer to local practices for the supplementary title fields.

5.0 SUBTITLE OR DESCRIPTIVE NOTE

5.1 DEFINITION: A descriptive phrase or subtitle which enhances the title.

5.2 PURPOSE: To supply additional information about the report.

5.3 CONTENT: Descriptive phrases such as:

> Patent
> Patent Application
> Data File
> Software

> or subtitles such as:

> Final rept
> Progress rept. 1 Jan-1 Apr 84
> Interim rept
> Master's thesis

5.4 USE: Mandatory, if available

5.5 EXTERNAL TAG: C04

5.6 CHARACTER SET: Standard ASCII characters

5.7 DATA SOURCE: The subtitle or descriptive note is taken from the report following conventions listed above.

5.8 NOTES: Depending on existing local practices, this information may be entered in the title field.

6.0 PERSONAL AUTHOR

6.1 DEFINITION: Name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report.

6.2 PURPOSE: To permit retrieval of the report by author name and to group together the works of an individual.

6.3 CONTENT:

6.3.1 Normally personal author names can be found on the title page or cover page of the report. Sometimes the author name is found in the body of the report, such as in analytics or on the RDP (Report Documentation Page). Whenever the word 'by' precedes the name, the name is entered as the author.

If an author cannot be found in these various places the following types may be considered authors:

person submitting the report	collaborator
principal investigator	coordinator
project manager	

6.3.2 Names are recorded as full last name plus initials of first name and middle name, omitting titles, degrees, Jr., Sr., etc. Names are recorded this way to facilitate magnetic tape exchange standardization. (Also see NOTE below.)

6.3.3 The names of those serving as editor (ed) or compiler (comp) are also recorded, as appropriate; but translators' names are omitted.

6.3.4 Ideally, all names should be recorded; in practice, the maximum number of names a specific machine system will accommodate is recorded. Names are separated by semicolons.

6.3.5 Foreign names are recorded according to a standard format and transliteration scheme, such as ANSI Z39.24-1976, System for Romanization of Slavic Cyrillic Characters, and AACR2 rules for treatment of surnames with separately written prefixes (see Appendix 3). The apostrophe in personal author names should be retained, but accents and other diacritical marks should be omitted except as given in Appendix 4.

6.4 USE: Mandatory, if available

6.5 EXTERNAL TAG: C02

6.6 CHARACTER SET: Standard ASCII characters

6.7 DATA SOURCE: Personal authors' names are taken from the report following the conventions listed above.

6.8 NOTES: Author names are entered differently by the various agencies for input into their data bases. Certain agencies enter full author names; other agencies enter first name first, then last name. Refer to local practices for input instructions. For magnetic tape exchange, standardization is adhered to, i.e., full last name plus initials of first and middle names are recorded.

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7.0 PUBLICATION DATE

7.1 DEFINITION: The date the document was published.

7.2 PURPOSE: To indicate the age of the report.

7.3 CONTENT: The date as it appears on the title page or cover of the report is recorded according to local practice.

7.3.1 If no date appears on the title page or cover, one of the following may be used: date work was completed, date submitted, latest bibliographic reference date or the copyright date. If a year is embedded in the report number, it may be used as the publication date. When all sources fail, an estimated date is recorded. If feasible, this date should appear in brackets.

7.3.2 Patents require two dates: the date the patent was published and the date the application for the patent was filed, or the date of a foreign priority (the priority date takes precedence over the filed date).

ENTER AS:

Filed 1 Jan 83, patented 6 Jun 84.

7.3.3 Patent applications require one date, the date the application for the patent was filed.

ENTER AS:

Filed 1 Jan 83.

7.3.4 If the report is copyrighted, that information may be included with the date or included in another relevant field.

ENTER AS:

c1984, cMay 84, c14 May 84 (as appropriate)

7.4 USE: Mandatory

7.5 EXTERNAL TAG: C09

7.6 CHARACTER SET: Alphanumeric characters in standard format

7.7 DATA SOURCE: The publication date is usually found on the document. If no date appears it is determined by staff as described above.

7.8 NOTES: Standards for calendar date to be used for the machine handling of dates for the year 2000 and beyond will be addressed in a future CENDI publication. Standards being considered to allow for eight numeric characters are: ANSI X3.30-1971, American National Standard Representation for Calendar Date and Ordinal Date for Information Interchange; FIPS PUB 4: Calendar Date; and ISO 2014-1976(E), Writing of Calendar Dates in All-Numeric Form.

8.0 PAGINATION (FOR PRINTED DOCUMENTS)

8.1 DEFINITION: The total number of pages with print, including cover pages, diagrams, charts, maps, etc. Oversize pages are counted for the number of frames of microfiche needed to reproduce them.

8.2 PURPOSE: To indicate the length of the report for determining price.

8.3 CONTENT: Numeric characters represent the total number of pages.

8.4 USE: Mandatory

8.5 EXTERNAL TAG: C10

8.6 CHARACTER SET: Standard ASCII characters

8.7 DATA SOURCE: Pagination is determined by counting the pages of the report.

8.8 NOTES: This data element is used to record document size for print media, whether paper or microform. Document size governs copy prices, hence attention to number of frames of fiche needed.

9.0 MEDIUM/FORMAT (FOR NON-PRINT MEDIA)

This Section is being developed by the CENDI Cataloging Committee and will appear in the next edition of the Guidelines.

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10.0 FUNDING NUMBER(S)

10.1 DEFINITION: A unique number identifying the financial support of the research or work reported. These are generally contract numbers, grant numbers and order numbers.

10.2 PURPOSE: To provide the user with financial support information.

10.3 CONTENT: All contract, grant, or order numbers are recorded as they appear on the document. Each agency maintains lists of authorized funding numbers; deviations from the authorized forms are edited for consistency.

Some examples of contract numbers are:

AC01-77RG08684	FG02-79ET00079
AC02-76CH04026	GRI-5082-260-0737
A101-82ER60059	H0308106
AID/OTR-C-1453	HUD-H-2164
AM03-76SF00936	MDA903-78-C-0180
DAAG20-80-C-0041	MIPR-DCA-M00004
DAJA38-80-C-0032	N00014-82-C-2501
DAMD17-80-C-0142	N62474-82-C-8277
DI-14-12-0001-0145	NAS8-349-9
DLA900-80-C-2853	NAS-3728
DOT-UMTA-TN-090051	NSF-ECS81-06675
EPA-68-01-3210	PHS-HSM-110-72-325
F49620-83-C-0082	W-7405-ENG-26

Some examples of grant numbers are:

AF-AFOSR-62-347 (prior to 1963)	EPA-G-005103
AF-AFOSR-2999076 (1963-77)	EPA-R-803729
AFOSR-77-0000 (post 1977)	HUD-CPA-CA-1068
AID/TA-G-1421	N00014-76-G-0006
DA-ARC-D-31-124-73-G67	NGL-22-009-124
DA-ERO-75-G-046	NGR-05-002-333
DAHC04-74-G-0077	NSF-GP-39308
	SRS-11-57267

Some examples of order numbers are:

ARPA Order-600
DARPA Order-2182
NASA Order-S-54114

Some examples of deviant funding numbers are:

contract AT-11-GEN-16
contract AT(11-1)-GEN-16
  USE: AT(11-1)-GEN-16

10.3.1 Project names or numbers may be recorded in this field after the contract, grant, or order number if no other field is available. Task numbers may also be recorded, unless separate fields are provided for these numbers.

10.4 USE: Mandatory, if available

10.5 EXTERNAL TAG: C08

10.6 CHARACTER SET: Standard ASCII characters.

10.7 DATA SOURCE: Funding numbers are taken from the report following conventions listed above.

11.0 REPORT NUMBER(S)

11.1 DEFINITION: A unique report series number(s) assigned by the
      performing organization and/or by the sponsoring or monitoring
      organization.

11.2 PURPOSE: To provide the user with a handle for retrieving reports.

11.3 CONTENT: A report number should be recorded as closely as possible to
      the way the number appears on the report. If the number is cited two
      ways on the report, for example, in a short version and a more explicit
      version, the short version is used.

      APPEARS AS: ENTER AS:

      NASA Contractor Report 263   NASA/CR-263

11.3.1 Punctuation should follow the ANSI guidelines (ANSI Z39.23-1983; see
        NOTES below).

      APPEARS AS: ENTER AS:

      ASD TR-83-5014   ASD/TR-83/5014

      Replace an ampersand with a slash.

      APPEARS AS: ENTER AS:

      A&ES-64-8   A/ES-64-8

11.3.2 If a single report number is issued in several parts, this information
        is added to the report number in abbreviated form, separated by
        hyphens.

      APPEARS AS: ENTER AS:

      ORNL/NSIC-200-Volume 3 Number 3   ORNL/NSIC-200-VOL-3-NO-3

11.3.3 The following abbreviations for suffixes should be added to the report
        number(s) if not already present:

                    Addendum   ADD
                    Amendment   AMEND
                    Appendix   APP
                    Bibliography   BIB
                    Book   BK
                    Chapter   CH
                    Draft   DRAFT
                    Edition   ED
                    Number   NO

Part	PT
Revised	REV
Revision	REV
Section	SECT
Series	SER
Summary	SUMM
Supplement	SUPPL
Volume	VOL

Roman numerals are changed to Arabic.

11.3.4 If there are no identifying letters included in the report number, initials or an acronym of the organization name may be generated.

APPEARS AS: ENTER AS:

Forest Service Research   FSRP/NE-168
Paper NE-168

11.3.5 The word "report" is ignored when it appears in the middle of the report number.

APPEARS AS: ENTER AS:

NRL REPORT 5914   NRL-5914

However, if the letter "R" (meaning report) is used in the report number, it should be retained: AED-R-2117.

11.3.6 Many report numbers include descriptive words within the number; these words should be abbreviated. The abbreviations are:

Administrative note	ADN-	Environmental impact	
Administrative report	ADR-	statement	EIS-
Bibliography	BIB-	Environmental research	
Bulletin	BULL-	papers	ERP-
Circular	CIRC-	Final report	FR-
Conference	CONF-	Handbook	HB-
Conference proceedings	CP-	Information bulletin	IB
Contract report	CR-	Information circular	IC-
Contract technical report	CTR-	Instrumentation papers	IP-
Contribution	CONTRIB-	Interim report	IR-
Data files	DF-	Journal article	JA-
Data memo	DM-	Lecture series	LS-
Data report	DR-	Letter circular	LC-
Discussion paper	DP-	Magnetic tape	MT-
Draft environment statement	DES-	Manuscript	MS-
Engineering report	ER-	Memo	M-

11.3.6 (cont.)

Memo report	MR–	Series	SER–
Mimeograph series	MMS–	Special publication	SP–
Miscellaneous	MISC–	Special report	SR–
Miscellaneous paper	MP–	Special research memo	SRM–
Miscellaneous publication	MPUB–	Special research report	SRR–
Monograph	MONO–	Special study	SS–
Monograph series	MONO-SER	Special text	ST–
Occasional paper	OP–	Specification	SPEC–
Open file report	OFP–	Technical article	TA–
Pamphlet	PAM–	Technical bulletin	TB–
Patent application	PAT–APPL	Technical document	TD–
Proceedings	PROC–	Technical documentary	
Professional paper	PP–	report	TDR–
Progress report	PR–	Technical information	
Publication	PUB–	services	TIS–
Quarterly report	QR–	Technical memo	TM–
Reference	REF–	Technical memo report	TMR–
Report	see	Technical news bulletin	TNB–
	11.3.5	Technical note	TN–
Report of investigations	RI–	Technical paper	TP–
Research & development	R/D	Technical progress report	TPR–
Research bulletin	RB–	Technical publication	TPUB–
Research contribution	RC–	Technical report	TR–
Research memo	RM–	Technical report series	TRS–
Research note	RN–	Technical research note	TRN–
Research paper	RP–	Technical summary	TS–
Research report	RR–	Technical summary report	TSR–
Sea grant	SG–	Technical translation	TT–
Sea grant publication	SGP–	Test and evaluation report	T/ER–
Sea grant reprint	SGR–	Translation	TRANS–
Sea grant technical		Working paper	WP–
bulletin	SGTB–		

11.4 USE: Mandatory, if available

11.5 EXTERNAL TAG: C07

11.6 CHARACTER SET: Standard ASCII characters

11.7 DATA SOURCE: Report numbers are taken from the report. (ANSI Z39.25–1983 gives the correct format.)

11.8 NOTES: ANSI Z39.23–1983, Standard Technical Report Number, is being followed by many organizations responsible for reports; NTIS maintains the official registry of accredited numbers. These CENDI Guidelines for Descriptive Cataloging give rules for recording non-STRN report numbers.

12.0 AVAILABILITY

12.1 DEFINITION: The sales agency and/or price of the document.

12.2 PURPOSE: To cite from whom the report may be obtained and at what price.

12.3 CONTENT: The price of the report is given either by price codes or in dollars. The address of the organization from which the report can be obtained is provided. Whether the report is available in paper, microfiche, magnetic tape, etc., is explained.

Some abbreviations used in this data element are:

Paper copy/Hard copy	PC
Microfiche/micronegative	MF or MN
Micro card	MC
Magnetic tape	CP

12.4 USE: Mandatory

12.5 EXTERNAL TAG: C16

12.6 CHARACTER SET: Standard ASCII characters

12.7 DATA SOURCE: Availability information is determined by examining the report for the information or is provided by the monitoring agency.

13.0 SUPPLEMENTARY NOTES

13.1   DEFINITION: Supplementary descriptions of the document which are not cited in any other field.

13.2   PURPOSE: To provide additional information about the report.

13.3   CONTENT: Examples of such notes are:

> Also pub. as...
> Appendix to Repr. No. XXX dated...
> Bound with its...
> Color illustrations reproduced in black and white.
> Conference on...
> Consists of PB85-123456 thru PB85-123499.
> Doctoral thesis.
> Edited machine trans. of...
> Errata sheet dated...
> For system on magnetic tape see...
> Includes documentation.
> Includes two sheets of 24X reduction microfiche.
> Library of Congress catalog card no. ...
> Master's thesis.
> Original contains imagery. Original photography may be...
> Partial trans. from...
> Portions of this document are not fully legible.
> Prepared in cooperation with... (joint author).
> Presented at a Conference on...
> Previously announced as...
> Proceedings of the...
> Prior number(s)...
> Reissue of PATENT-3 365 955, dated 30 Jan 68.
> Revision of report dated...
> See also...
> Set includes...
> Sponsored in part by...
> Supersedes PAT-APPL-609-267-75
> Supersedes PAT-APPL-6-049 268.
> Supersedes Rept. no. ...
> Supplement to report dated...
> Symposium on...
> Text in...
> Thesis.
> Trans. of...
> Unedited rough draft trans. of...

13.3.1   Reports which are also available in the open/published literature should be cited:

> Pub. in (journal citation)

13.3.1 (cont.)

Abbreviations for journal names should be taken from EDB (Energy
Data Base) Serial Titles, DOE/TIC-4579 (Rev. 12), Mar. 82, or
latest edition.

13.4 USE: Mandatory, if available

13.5 EXTERNAL TAG: C17

13.6 CHARACTER SET: Standard ASCII characters

13.7 DATA SOURCE: Supplementary information is taken from the document.

13.8 NOTES: Certain agencies have more fields for the various data
elements. NASA and DOE have fields for conference information and
sponsoring information; DTIC and NTIS do not have separate fields for
these data elements and record the data in the Supplementary Notes
field. If other fields are available, use them; otherwise refer to
local practices.

14.0 SECURITY CLASSIFICATION

14.1 DEFINITION: The designation on the report of the specific degree of protection necessary, in the interest of national security, to prevent unauthorized disclosure.

14.2 PURPOSE: To indicate the sensitivity of the material in a report and the security procedures that must be used when handling the item.

14.3 CONTENT: The classification can be Unclassified, Confidential or Secret. Specific security regulations of each agency govern where the classification marking can be found on the report and how it should be entered in the citation.

14.4 USE: Mandatory

14.5 EXTERNAL TAG: N/A

14.6 CHARACTER SET: Standard ASCII characters

14.7 DATA SOURCE: Security classification of the report is displayed on the report.

14.8 NOTES: Additional security limitations placed on a report are added to the bibliographic record according to the needs of each cataloging agency.

15.0 SUBJECT FIELDS AND GROUPS

15.1 DEFINITION: Broad subject areas of science and/or technology covered by the document.

15.2 PURPOSE: Used to determine the subject arrangement of agency publication announcement journals.

15.3 CONTENT: Numeric codes from standard lists specific to the agencies' subject responsibilities; codes vary in number of characters.

15.4 USE: Mandatory

15.5 EXTERNAL TAG: C12

15.6 CHARACTER SET: Standard ASCII characters

15.7 DATA SOURCE: Fields and Groups are determined by staff using standard lists as follows:

- Subject Categorization Guide for Defense Science & Technology (in publication).

- NTIS Subject Classification (Past and Present) - PB-270 575, Jan. 1978.

- Energy Data Base Subject Categories. DOE-TIC-4584-R6, DE84017376.

- NASA Category Guide for STAR and IAA Categories. Rev. Sep. 1976.

- The NASA Scientific and Technical Information System...It's Scope and Coverage. (in revision). Sep. 1978.

15.8 NOTES: Most systems permit recording more than one subject code for the document.

16.0 DESCRIPTORS/SUBJECT TERMS

16.1 DEFINITION: Single or multi-word terms identifying important ideas and concepts in the report.

16.2 PURPOSE: To provide subject access to technical reports.

16.3 CONTENT: Terms are selected from specialized vocabularies maintained by each agency. Some provisions are made for recording in a separate field uncontrolled (often new) terms.

16.4 USE: Mandatory

16.5 EXTERNAL TAG: C13

16.6 CHARACTER SET: Standard ASCII characters

16.7 DATA SOURCE: Descriptors/Subject Terms are determined by staff using standard thesauri.

16.8 NOTES: DOE/OSTI links related concepts and flags such linkage when sending records to other agencies.

The official thesauri of the various agencies are:

DTIC: DDC Retrieval & Indexing Terminology (DRIT)
DOE: Energy Data Base: Subject Thesaurus
NASA: NASA Thesaurus
NTIS: Thesaurus of Engineering and Subject Terms (TEST), plus other micro-thesauri

17.0 ABSTRACT

17.1 DEFINITION: Concise statement of most significant information contained
      in a report.

17.2 PURPOSE: To identify quickly the basic contents of a report.

17.3 CONTENT: Freeform narrative, of an average maximum 2000 characters.
      Absence of an abstract is noted as appropriate. For verbalizing
      abstracts for machinability, see Appendix 4.

17.4 USE: Mandatory

17.5 EXTERNAL TAG: C14

17.6 CHARACTER SET: Standard ASCII characters

17.7 DATA SOURCE: Most abstracts are supplied by the author. If one is not
      available it is created by staff based on local practices.

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APPENDIX 1

Abbreviations Used in These Guidelines

ANSI   American National Standards Institute

COSATI   Committee on Scientific and Technical Information

DA   Department of Agriculture

DDC   Defense Documentation Center

DOC   Department of Commerce

DOD   Department of Defense

DOE   Department of Energy

DTIC   Defense Technical Information Center

FIPS PUB   Federal Information Processing Standards Publication

NASA   National Aeronautics and Space Administration

NTIS   National Technical Information Service

OSTI   Office of Scientific and Technical Information

STIF   Scientific and Technical Information Facility

TIC   Technical Information Center

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Political Subdivisions

The following list gives, in the first column, names of political subdivisions as they may appear on the report; the other two columns indicate the manner of referring to the country within the heading or in parts of the cross reference structure. (Principal Sources, Board on Geographic Names and FIPS PUB: Countries, Dependencies, Areas of Special Sovereignty, and their Principal Administrative Divisions, FIPS PUB 10-3, 1984 February 9).

Name of Political Subdivision	Name Used Within Parentheses	Name Used in Cross Reference or Coding Structure
Aberdeen, -shire	Scotland	United Kindgom-UK
Abyssinia	Ethiopia	Ethiopia-ET
Afghanistan	Afghanistan	Afghanistan-AF
Albania	Albania	Albania-AL
Alberta	Alberta	Canada-CA
Algeria	Algeria	Algeria-AG
Andhra Pradesh	India	India-IN
Andorra	Andorra	Andorra-AN
Anglesey	Wales	United Kingdom-UK
Angola	Angola	Angola-AO
Anguilla	Anguilla	Anguilla-AV
Angus	Scotland	United Kingdom-UK
Antarctica	Antarctica	Antarctica-AY
Antigua	Antigua	Antigua-AC
Antrim	Northern Ireland	United Kingdom-UK
Ards	Northern Ireland	United Kingdom-UK
Argentina	Argentina	Argentina-AR
Argyll, -shire	Scotland	United Kingdom-UK
Armagh	Northern Ireland	United Kingdom-UK
Armenia	USSR	USSR-UR
Ashmore and Cartier Islands	Ashmore and Cartier Islands	Ashmore and Cartier Islands-AT
Assam	India	India-IN
Australia	Australia	Australia-AS
Australian Capital Territory	Australia	Australia-AS
Austria	Austria	Austria-AU
Avon	England	United Kingdom-UK
Ayre, -shire	Scotland	United Kingdom-UK
Azerbaijan	USSR	USSR-UR
Bahamas	The Bahamas	Bahamas-BF
Bahrain	Bahrain	Bahrain-BA
Ballymena	Northern Ireland	United Kingdom-UK
Ballymoney	Northern Ireland	United Kingdom-UK

Name of Political Subdivision	Name Used Within Parentheses	Name Used in Cross Reference or Coding Structure
Banbridge	Northern Ireland	United Kingdom-UK
Banff, -shire	Scotland	United Kingdom-UK
Bangladesh	Bangladesh	Bangladesh-BG
Barbados	Earbados	Barbados-BB
Bedford, -shire	England	United Kingdom-UK
Belfast	Northern Ireland	United Kingdom-UK
Belgian Congo	Zaire	Zaire-CG
Belgium	Belgium	Belgium-BE
Belize	Belize	Belize-BH
Beloruesia	USSR	USSR-UR
Bengal	India	India-IN
Benin	Benin	Benin-DM
Berkshire	England	United Kingdom-UK
Berln, East	German D.R.	German D.R. -GC
Berlin, West	Germany	Germany, Berlin-BZ
Bermuda	Bermuda	Bermuda-BD
Berwick, -shire	Scotland	United Kingdom-UK
Bhutan	Bhutan	Bhutan-BT
Bihar	India	India-IN
Bolivia	Bolivia	Bolivia-BL
Bombay	India	India-IN
Borders	Scotland	United Kingdom-UK
Botswana	Botswana	Botswana-BC
Bouvetoya Island	Bouvet Is'and	Bouvet Island-BV
Brazil	Brazil	Brazil-BR
Brecknock, -shire	Wales	United Kingdom-UK
British Columbia	British Columbia	Canada-CA
British Commonwealth - See Name of Individual State		
British Indian Ocean Territory	British Indian Ocean Territory	British Indian Ocean Territory-IO
British Solomon Islands	Solomon Islands	Solomon Islands-BP
British Virgin Islands	British Virgin Islands	British Virgin Islands-VI
Brunei	Brunei	Brunei-BX
Buckingham, -shire	England	United Kingdom-UK
Bulgaria	Bulgaria	Bulgaria-BU
Burma	Burma	Burma-BM
Burundi	Burundi	Burundi-BY
Bute, -shire	Scotland	United Kingdom-UK
Caernarvon, -shire	Wales	United Kingdom-UK
Caithness	Scotland	United Kingdom-UK
Cambodia	Cambodia	Cambodia-CB
Cambridge, -shire	England	United Kingdom-UK
Cameroon	Cameroon	Cameroon-CM

Name of Political Subdivision	Name Used Within Parentheses	Name Used in Cross Reference or Coding Structure
Canada	Name of Individual Province	Canada-CA
Canton and Ender-bury Islands	Canton and Ender-bury Islands	Canton and Enderbury Islands-EQ
Cape Verde	Cape Verde	Cape Verde-CV
Cardigan, -shire	Wales	United Kingdom-UK
Carrickfergus	Northern Ireland	United Kingdom-UK
Castlereagh	Northern Ireland	United Kingdom-UK
Cayman Islands	Cayman Islands	Cayman Islands-CJ
Central	Scotland	United Kingdom-UK
Central African Empire	Central African Empire	Central African Empire-CT
Central African Republic	Central African Empire	Central African Empire-CT
Ceylon	Sri Lanka	Sri Lanka-CE
Chad	Chad	Chad-CD
Cheshire	England	United Kingdom-UK
Chile	Chile	Chile-CI
China	China	China-CH
China (Taiwan)	Taiwan	Taiwan-TW
Christmas Island	Christmas Island	Christmas Island-KT
Clackmannan, -shire	Scotland	United Kingdom-UK
Cleveland	England	United Kingdom-UK
Clwyd	Wales	United Kingdom-UK
Cocos (Keeling) Islands	Cocos (Keeling) Islands	Cocos (Keeling) Islands-CK
Coleraine	Northern Ireland	United Kingdom-UK
Colombia	Colombia	Colombia-CO
Comoro Islands	Comoro Islands	Comoro Islands-CN
Congo	Congo	Congo-CF
Congo (Kinshasha)	Zaire	Zaire-CG
Cook Islands	Cook Islands	Cook Islands-CW
Cookstown	Northern Ireland	United Kingdom-UK
Coral Sea Islands Territory	Coral Sea Islands Territory	Coral Sea Islands Territory-CR
Cornwall	England	United Kingdom-UK
Costa Rica	Costa Rica	Costa Rica-CS
Craigavon	Northern Ireland	United Kingdom-UK
Cuba	Cuba	Cuba-CU
Cumberland	England	United Kingdom-UK
Cumbria	England	United Kingdom-UK
Cyprus	Cyprus	Cyprus-CY
Czechoslovakia	Czechoslovakia	Czechoslovakia-CZ
Dahomey	Benin	Benin-DM
Delhi	India	India-IN

Name of Political Subdivision	Name Used Within Parentheses	Name Used in Cross Reference or Coding Structure
Democratic Kampuchea	Cambodia	Cambodia-CB
Denbigh, -shire	Wales	United Kingdom-UK
Denmark	Denmark	Denmark-DA
Derby, -shire	England	United Kingdom-UK
Devon, -shire	England	United Kingdom-UK
Djibouti	Djibouti	Djibouti-DJ
Dominica	Dominica	Dominica-DO
Dominican Republic	Dominican Republic	Dominican Republic-DR
Dorset, -shire	England	United Kingdom-UK
Down	Northern Ireland	United Kingdom-UK
Dumbarton, -shire	Scotland	United Kingdom-UK
Dumfries, -shire	Scotland	United Kingdom-UK
Dumfries and Galloway	Scotland	United Kingdom-UK
Dungannon	Northern Ireland	United Kingdom-UK
Durham	England	United Kingdom-UK
Dyfed	Wales	United Kingdom-UK
East Berlin	German D.R.	German D.R.-GC
East Germany	German D.R.	German D.R.-GC
East Lothian	Scotland	United Kingdom-UK
East Sussex	England	United Kingdom-UK
Ecuador	Ecuador	Ecuador-EC
Egypt	Egypt	Egypt-EG
Eire	Ireland	Ireland-EI
El Salvador	El Salvador	El Salvador-ES
England	England	United Kingdom-UK
Equatorial Guinea	Equatorial Guinea	Equatorial Guinea-EK
Essex	England	United Kingdom-UK
Estonia	USSR	USSR-UR
Ethiopia	Ethiopia	Ethiopia-ET
Faeroe Islands	Faeroe Islands	Faeroe Islands-FO
Falkland Islands (Islas Malvinas)	Falkland Islands (Islas Malvinas)	Falkland Islands (Islas Malvinas) -FA
Federal Republic of Germany	Germany, F.R.	Germany, F.R.-GE
Federation of Malaysia	Malaysia	Malaysia-MY
Fermanagh	Northern Ireland	United Kingdom-UK
Fife, -shire	Scotland	United Kingdom-UK
Fiji	Fiji	Fiji-FJ
Finland	Finland	Finland-FI
Flint, -shire	Wales	United Kingdom-UK
Formosa	Taiwan	Taiwan-TW
France	France	France-FR

Name of Political Subdivision	Name Used Within Parentheses	Name Used in Cross Reference or Coding Structure
French Community - See Name of Individual State		
French Guiana	French Guiana	French Guiana-FG
French Polynesia	French Polynesia	French Polynesia-FP
French Southern and Antarctic Lands	French Southern and Antarctic Lands	French Southern and Antarctic Lands-FS
French Territory of Afars and Issas	Djibouti	Djibouti-DJ
Gabon Republic	Gabon Republic	Gabon Republic-GB
Gambia	Gambia	Gambia-GA
Georgia	USSR	USSR-UR
German Democratic Republic	German D.R.	German D.R.-GC
Germany, Federal Republic of	Germany, F.R.	Germany, F.R.-GE
Ghana	Ghana	Ghana-GH
Gibraltar	Gibraltar	Gibraltar-GI
Gilbert Islands	Gilbert Islands	Gilbert Islands-GS
Glamorgan, -shire	Wales	United Kingdom-UK
Gloucester, -shire	England	United Kingdom-UK
Goa	India	India-IN
Grampion	Scotland	United Kingdom-UK
Great Britain	See Name of Country	United Kingdom-UK
Greater London	England	United Kingdom-UK
Greater Manchester	England	United Kingdom-UK
Greece	Greece	Greece-GR
Greenland	Greenland	Greenland-GL
Grenada	Grenada	Grenada-GJ
Gruziya	USSR	USSR-UR
Guadeloupe	Guadeloupe	Guadeloupe-GP
Guatemala	Guatemala	Guatemala-GT
Guinea	Guinea	Guinea-GV
Gujarat	India	India-IN
Guyana	Guyana	Guyana-GY
Gwent	Wales	United Kingdom-UK
Gwynedd	Wales	United Kingdom-UK
Haiti	Haiti	Haiti-HA
Hampshire	England	United Kingdom-UK
Haryana	India	India-IN
Hashemite Kingdom of Jordan	Jordan	Jordan-JO
Heard Island and McDonald Islands	Heard Island and McDonald Islands	Heard Island and McDonald Islands-HM
Hereford, -shire	England	United Kingdom-UK
Hereford and Worcester	England	United Kingdom-UK

Name of Political Subdivision	Name Used Within Parentheses	Name Used in Cross Reference or Coding Structure
Hertfordshire	England	United Kingdom-UK
Highland	Scotland	United Kingdom-UK
Himachal Pradesh	India	India-IN
Honduras	Honduras	Honduras-HO
Hong Kong	Hong Kong	Hong Kong-HK
Humberside	England	United Kingdom-UK
Hungary	Hungary	Hungary-HU
Huntingdon, -shire	England	United Kingdom-UK
Hyderabad	India	India-IN
Iceland	Iceland	Iceland-IC
India	India	India-IN
Indonesia	Indonesia	Indonesia-ID
Inverness, -shire	Scotland	United Kingdom-UK
Iran	Iran	Iran-IR
Iraq	Iraq	Iraq-IZ
Iraq-Saudi Arabia Neutral Zone	Iraq-Saudi Arabia Neutral Zone	Iraq-Saudi Arabia Neutral Zone-IY
Ireland	Ireland	Ireland-EI
Ireland (Northern)	Northern Ireland	United Kingdom-UK
Islamic Republic of Mauritania	Mauritania	Mauritania-MR
Isle of Wight	England	United Kingdom-UK
Israel	Israel	Israel-IS
Italy	Italy	Italy-IT
Ivory Coast	Ivory Coast	Ivory Coast-IV
Jamaica	Jamaica	Jamaica-JM
Japan	Japan	Japan-JA
Johnston Atoll	Johnston Atoll	Johnston Atoll-JQ
Jordan	Jordan	Jordan-JO
Karnataka	India	India-IN
Kashmir	India	India-IN
Kazakhstan	USSR	USSR-UR
Kent	England	United Kingdom-UK
Kenya	Kenya	Kenya-KE
Kerala	India	India-IN
Khmer Republic	Cambodia	Cambodia-CB
Kincardine, -shire	Scotland	United Kingdom-UK
Kinross, -shire	Scotland	United Kingdom-UK
Kirghizia	USSR	USSR-UR
Kirkcudbright, -shire	Scotland	United Kingdom-UK

Name of Political Subdivision	Name Used Within Parentheses	Name Used in Cross Reference or Coding Structure
Korea, Democratic Peoples Repulic of	Korea, D.P.R.	Korea, D.P.R.-KN
Korea, Republic of	Republic of Korea	Korea, Republic of-KS
Kuwait	Kuwait	Kuwait-KU
Lanark, -shire	Scotland	United Kingdom-UK
Lancashire	England	United Kingdom-UK
Laos	Laos	Laos-LA
Larne	Northern Ireland	United Kingdom-UK
Latvia	USSR	USSR-UR
Lebanon	Lebanon	Lebanon-LE
Leicestershire	England	United Kingdom-UK
Lesotho	Lesotho	Lesotho-LT
Liberia	Liberia	Liberia-LI
Libya	Libya	Libya-LY
Liechtenstein	Liechtenstein	Liechtenstein-LS
Limavady	Northern Ireland	United Kingdom-UK
Lincoln, -shire	England	United Kingdom-UK
Lisburn	Northern Ireland	United Kingdom-UK
Lithuania	USSR	USSR-UK
London	England	United Kingdom-UK
Londonderry	Northern Ireland	United Kingdom-UK
Lothian	Scotland	United Kingdom-UK
Luxembourg	Luxembourg	Luxembourg-LU
Macao	Macao	Macao-MC
Madagascar	Malagasy Republic	Malagasy Republic-MA
Madhya Pradesh	India	India-IN
Madras	India	India-IN
Magherafelt	Northern Ireland	United Kingdom-UK
Maharashtra	India	India-IN
Mainland China	China	China-CH
Malagasy Republic	Malagasy Republic	Malagasy Republic-MA
Malawi	Malawi	Malawi-MI
Malaysia	Malaysia	Malaysia-MY
Maldives	Maldives	Maldives-MV
Mali	Mali	Mali-ML
Malta	Malta	Malta-MT
Manitoba	Manitoba	Canada-CA
Martinique	Martinique	Martinique-MB
Mauritania	Mauritania	Mauritania-MR
Mauritius	Mauritius	Mauritius-MP
Merioneth, -shire	Wales	United Kingdom-UK
Merseyside	England	United Kingdom-UK
Mexico	Mexico	Mexico-MX
Mid Glamorgan	Wales	United Kingdom-UK
Middle Congo	Congo	Congo-CF

Name of Political Subdivision	Name Used Within Parentheses	Name Used in Cross Reference or Coding Structure
Middlesex	England	United Kingdom-UK
Midlothian	Scotland	United Kingdom-UK
Midway Islands	Midway Islands	Midway Islands-MQ
Moldavia	USSR	USSR-UR
Monaco	Monaco	Monaco-MN
Mongolia	Mongolia	Mongolia-MG
Monmouth, -shire	England	United Kingdom-UK
Montgomery, -shire	Wales	United Kingdom-UK
Montserrat	Montserrat	Montserrat-MH
Moray, -shire	Scotland	United Kingdom-UK
Morocco	Morocco	Morocco-MO
Moyle	Northern Ireland	United Kingdom-UK
Mozambique	Mozambique	Mozambique-MZ
Mysore	India	India-IN
Nagaland	India	India-IN
Nairn, -shire	Scotland	United Kingdom-UK
Namibia	Namibia	Namibia-WA
National Republic of China	China (Taiwan)	China (Taiwan)-TW
Nauru	Nauru	Nauru-NR
Navassa Island	Navassa Island	Navassa Island-BQ
Nepal	Nepal	Nepal-NP
Netherlands	Netherlands	Netherlands-NL
Netherlands Antilles	Netherlands Antilles	Netherlands Antilles-NA
New Brunswick	New Brunswick	Canada-CA
New Caledonia	New Caledonia	New Caledonia-NC
New Hebrides	New Hebrides	New Hebrides-NH
New South Wales	Australia	Australia-AS
New Zealand	New Zealand	New Zealand-NZ
Newfoundland	Newfoundland	Canada-CA
Newry and Mourne	Northern Ireland	United Kingdom-UK
Newtownabbey	Northern Ireland	United Kingdom-UK
Nicaragua	Nicaragua	Nicaragua-NU
Niger	Niger	Niger-NG
Nigeria	Nigeria	Nigeria-NI
Niue	Niue	Niue-NE
Norfolk	England	United Kingdom-UK
Norfolk Island	Norfolk Island	Norfolk Island-NF
North Down	Northern Ireland	United Kingdom-UK
North Korea	Korea, D.P.R.	Korea, D.P.R.-KN
North Vietnam	Vietnam	Vietnam-VM
North Yorkshire	England	United Kingdom-UK
Northampton, -shire	England	United Kingdom-UK
Northern Ireland	Northern Ireland	United Kingdom-UK
Northern Rhodesia	Zambia	Zambia-ZA

Name of Political Subdivision	Name Used Within Parentheses	Name Used in Cross Reference or Coding Structure
Northern Territory	Australia	Australia-AS
Northumberland	England	United Kingdom-UK
Northwest Territories	Northwest Territories	Canada-CA
Norway	Norway	Norway-NO
Nottingham, -shire	England	United Kingdom-UK
Nova Scotia	Nova Scotia	Canada-CA
Nyasaland	Malawi	Malawi-MI
Omagh	Northern Ireland	United Kingdom-UK
Oman	Oman	Oman-MU
Ontario	Ontario	Canada-CA
Orissa	India	India-IN
Orkney	Scotland	United Kingdom-UK
Outer Mongolia	Mongolia	Mongolia-MG
Oxford, -shire	England	United Kingdom-UK
Pakistan	Pakistan	Pakistan-PK
Panama	Panama	Panama-PN
Papua New Guinea	Papua New Guinea	Papua New Guinea-PP
Paracel Islands	Paracel Islands	Paracel Islands-PF
Paraguay	Paraguay	Paraguay-PA
Peeples, -shire	Scotland	United Kingdom-UK
Pembroke, -shire	Wales	United Kingdom-UK
People's Republic of... See Name of Individual Republic		
Perth, -shire	Scotland	United Kingdom-UK
Peru	Peru	Peru-PE
Philippines	Philippines	Philippines-RP
Pitcairn Island	Pitcairn Island	Pitcairn Island-PC
Poland	Poland	Poland-PL
Portugal	Portugal	Portugal-PO
Portuguese Guinea	Portuguese Guinea	Portuguese Cuinea-PU
Portuguese Timor	Indonesia	Indonesia-ID
Powys	Wales	United Kingdom-UK
Prince Edward Island	Prince Edward Island	Canada-CA
Punjab	India	India-IN
Qatar	Qatar	Qatar-QA
Quebec	Quebec	Canada-CA
Queensland	Australia	Australia-AS
R. P. R.	Romania	Romania-RO
Radnor	Wales	United Kingdom-UK
Rajasthan	India	India-IN
Renfrew, -shire	Scotland	United Kingdom-UK
Republic of...See Name of Individual Republic		
Reunion	Reunion	Reunion-RE

Name of Political Subdivision	Name Used Within Parentheses	Name Used in Cross Reference or Coding Structure
Rhodesia	Rhodesia	Rhodesia-RH
Romania	Romania	Romania-RO
Ross and Cromarty	Scotland	United Kingdom-UK
Roxburgh, -shire	Scotland	United Kingdom-UK
Ruanda-Urundi	Burundi or Rwanda	Burundi-BY or Rwanda-RW
Rumania	Romania	Romania-RO
Russian Soviet Federated Socialist Republic	USSR	USSR-UR
Rutland	England	United Kingdom-UK
Rwanda	Rwanda	Rwanda-RW
St. Christopher-Nevis-Anguilla	St. Christopher-Nevis-Anguilla	St. Christopher-Nevis-Anguilla-SC
St. Kitts	St. Christopher-Nevis-Anguilla	St. Christopher-Nevis-Anuilla-SC
St. Helena	St. Helena	St. Helena-SH
St. Lucia	St. Lucia	St. Lucia-ST
St. Pierre and Miquelon	St. Pierre and Miquelon	St. Pierre and Miquelon-SB
St. Vincent	St. Vincent	St. Vincent-VC
Salop	England	United Kingdom-UK
San Marino	San Marino	San Marino-SM
Sao Tome and Principe	Sao Tome and Principe	Sao Tome and Principe-TP
Saskatchewan	Saskatchewan	Canada-CA
Saudi Arabia	Saudi Arabia	Saudi Arabia-SA
Scotland	Scotland	United Kingdom-UK
Selkirk, -shire	Scotland	United Kingdom-UK
Senegal	Senegal	Senegal-SG
Seychelles	Seychelles	Seychelles-SE
Shetland	Scotland	United Kingdom-UK
Shropshire	England	United Kingdom-UK
Siam	Thailand	Thailand-TH
Sierra Leone	Sierra Leone	Sierra Leone-SL
Sikkim	India	India-IN
Singapore	Singapore	Singapore-SN
Solomon Islands	Solomon Islands	Solomon Islands-BP
Somalia	Somalia	Somalia-SO
Somerset, -shire	England	United Kingdom-UK
South Africa	South Africa	South Africa-SF
South Australia	Australia	Australia-AS
South Glamorgan	Wales	United Kingdom-UK
South Korea	Republic of Korea	Korea, Republic of-KS
South Vietnam	Vietnam	Vietnam-VM
South-West Africa	Namibia	Namibia-WA
South Yorkshire	England	United Kingdom-UK

Name of Political Subdivision	Name Used Within Parentheses	Name Used in Cross Reference or Coding Structure
Southern Rhodesia	Rhodesia	Rhodesia-RH
Soviet Union	USSR	USSR-UR
Spain	Spain	Spain-SP
Spanish Sahara	West Spanish Sahara	West Spanish Sahara-WI
Spratly Islands	Spratly Islands	Spratly Islands-PG
Sri Lanka	Sri Lanka	Sri Lanka-CE
Stafford, -shire	England	United Kingdom-UK
Stirling, -shire	Scotland	United Kingdom-UK
Strabane	Northern Ireland	United Kingdom-UK
Strathclyde	Scotland	United Kingdom-UK
Sudan	Sudan	Sudan-SU
Sudanese Republic	Mali	Mali-ML
Suffolk	England	United Kingdom-UK
Surinam	Surinam	Surinam-NS
Surrey	England	United Kingdom-UK
Sussex	England	United Kingdom-UK
Sutherland	Scotland	United Kingdom-UK
Svalbard and Jan Mayen Islands	Svalbard and Jan Mayen Islands	Svalbard and Jan Mayen-SV
Swaziland	Swaziland	Swaziland-WZ
Sweden	Sweden	Sweden-SW
Switzerland	Switzerland	Switzerland-SZ
Syria	Syria	Syria-SY
Tadzhikistan	USSR	USSR-UR
Taiwan	Taiwan	Taiwan-TW
Tamil Nadu	India	India-IN
Tanganyika	Tanzania	Tanzania-TZ
Tanzania	Tanzania	Tanzania-TZ
Tasmania	Australia	Australia-AS
Tayside	Scotland	United Kingdom-UK
Thailand	Thailand	Thailand-TH
Tibet	China	China-CH
Tobago	Trinidad and Tobago	Trinidad and Tobago-TD
Togo	Togo	Togo-TO
Tokelau Islands	Tokelau Islands	Tokelau Islands-TL
Tongo	Tongo	Tongo-TN
Trinidad and Tobago	Trinidad and Tobago	Trinidad and Tobago-TD
Trust Territory of the Pacific Islands	Trust Territory of the Pacific Islands	Trust Territory of the Pacific Islands-TQ
Tunisia	Tunisia	Tunisia-TS
Turkey	Turkey	Turkey-TU

Name of Political Subdivision	Name Used Within Parentheses	Name Used in Cross Reference or Coding Structure
Turkmenistan	USSR	USSR-UR
Turks and Caicos Islands	Turks and Caicos Islands	Turks and Caicos Islands-TK
Tyne and Wear	England	United Kingdom-UK
Ucangi-Shari	Central African Empire	Central African Empire-CT
Uganda	Uganda	Uganda-UG
Ukraine	USSR	USSR-UR
Union of South Africa	South Africa	South Africa-SF
United Arab Emirates	United Arab Emirates	United Arab Emirates-TC
United Arab Republic	Egypt	Egypt-EG
United Kingdom	See England, Northern Ireland, Scotland, Wales	United Kingdom-UK
United Republic of Tanzania	Tanzania	Tanzania-TZ
United States Misc. Pacific Islands	United States Misc. Pacific Islands	United States Misc. Pacific Islands-IQ
Upper Volta	Upper Volta	Upper Volta
Uruguay	Uruguay	Uruguay-UY
USSR	USSR	USSR
Uttar Pradesh	India	India-IN
Uzbekistan	USSR	USSR-UR
Vatican City	Vatican City	Vatican City-VT
Venezuela	Venezuela	Venezuela-VE
Victoria	Australia	Australia-AS
Vietnam	Vietnam	Vietnam-VM
Wake Island	Wake Island	Wake Island-WQ
Wales	Wales	United Kingdom-UK
Wallis and Futuna	Wallis and Futuna	Wallis and Futuna-WF
Warwick, -shire	England	United Kingdom-UK
West Bengal	India	India-IN
West Berlin	Germany	Germany, Berlin-BZ
West Germany	Germany, F.R.	Germany, F.R.-GE
West Glamorgan	Wales	United Kingdom-UK
West Lothian	Scotland	United Kingdom-UK
West Midlands	England	United Kingdom-UK
West Sussex	England	United Kingdom-UK
West Yorkshire	England	United Kingdom-UK
Western Australia	Australia	Australia-AS
Western Isles	Scotland	United Kingdom-UK

Name of Political Subdivision	Name Used Within Parentheses	Name Used in Cross Reference or Coding Structure
Western Samoa	Western Samoa	Western Samoa-WS
Westmorland	England	United Kingdom-UK
Wigtown, -shire	Scotland	United Kingdom-UK
Wiltshire	England	United Kingdom-UK
Worcester, -shire	England	United Kingdom-UK
Yemen (Aden)	Yemen (Aden)	Yemen (Aden)-YS
Yemen (San'a)	Yemen (San'a)	Yemen (San'a)-YE
York, -shire	England	United Kingdom-UK
Yugoslavia	Yugoslavia	Yugoslavia-YO
Yukon	Yukon	Canada-CA
Zaire	Zaire	Zaire-CG
Zambia	Zambia	Zambia-ZA
Zanzibar	Tanzania	Tanzania-TZ

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Treatment of Foreign Surnames with Separately Written Prefixes

(Authority: Anglo-American Cataloging Rules, Second Edition - AACR2)

(Adapted from pages 358-364)

1. <u>General Rule</u>

   Enter a name containing a surname under that surname

   Bernhardt, Sarah

2. <u>Compound surnames</u>

   Preliminary rule: The following rules deal with the entry of surnames consisting of two or more proper names (referred to as "compound surnames") and names that may or may not contain compound surnames. Apply the rules in the order given.

   Preferred or established form known: Enter a name containing a compound surname under the element by which the person bearing the name prefers to be entered. If this is unknown, enter the name under the element under which it is listed in reference sources in the person's language or country of residence.

APPEARS AS:	ENTER AS:
Francois de Salignac de La Mothe-Fenelon	Fenelon, F. de S. de La M.-
David Lloyd George (Paternal surname: George)	Lloyd George, D.

   Hyphenated surnames: If the elements of a compound surname are regularly or occasionally hyphenated, enter under the first element.

APPEARS AS:	ENTER AS:
Cecil Day-Lewis	Day-Lewis, C.

NOTE: AACR2 uses the full first name and second name (if available). CENDI uses only initials for the first and second name. These excerpts have been modified to reflect the CENDI practice.

Other compound surnames, except those of married women whose surname consists of a combination of maiden name and husband's surname: Enter under the first element of the compound surname unless the person's language is Portuguese. If the person's language is Portuguese, enter under the last element.

2. <u>Compound Surnames</u> (cont.)

APPEARS AS:		ENTER AS:
Gaston Castres Saint Martin		Castres Saint Martin, G.
	BUT	
Ovidio Saraiva de Carvalho e Silva		Silva, O. S. de C. e

Nature of surname uncertain: If a name has the appearance of a compound surname but its nature is not certain, treat it as a compound surname. Enter under the last part of the name.

APPEARS AS:	ENTER AS:
John Crawford Adams	Adams, J. C.
Joseph Jenkins Lee	Lee, J. J.
Haakon Bugge Mahrt	Mahrt, H. B.
Ib Spang Olsen	Olsen, I. S.

Place names following surnames: If a place name is hyphenated to the person's surname, follow the instructions for hyphenated surnames.

APPEARS AS:	ENTER AS:
Heinrich Muller-Breslau	Muller-Breslau, H.

Words indicating relationship following surnames: Treat the words Filho, Junior, Nevo, Netto, or Sobrinho following Portuguese surnames as part of the surname.

APPEARS AS:	ENTER AS:
Antonio Ribeiro de Castro Sobrinho	Castro Sobrinho, A. R. de
Henrique Marques Junior	Marques Junior, H.

3. <u>Surnames with separately written prefixes</u>

Articles and prepositions: If a surname includes an article or preposition or combination of the two, enter under the element most commonly used as entry element in listings in the person's language or country of residence. See the list of languages and language groups below.

If such a name is listed in a nonstandard fashion in reference sources in the person's language or country of residence, enter under the entry element used there.

3. <u>Surnames with separately written prefixes</u> (cont.)

If a person has used two or more languages, enter the name according to the language of most of that person's works. In case of doubt, follow the rules for English if English is one of the languages. Otherwise, if the person is known to have changed his or her country of residence, follow the rules for the language of the adopted country. As a last resort, follow the rules for the language of the name.

Specific languages and language groups:

DANISH. See Scandinavian languages.

DUTCH. If the surname is Dutch, enter under the part following the prefix unless the prefix is ver. In that case, enter under the prefix.

<u>APPEARS AS</u>:	<u>ENTER AS</u>:
Pieter van der Aa	Aa, P. van der
Leo op de Beeck	Beeck, L. op de
Menno ter Braak	Braak, M. ter
Jan ten Brink	Brink, J. ten
Albert van Driessche	Driessche, A. van
Ary den Hertog	Hertog, A. den
Jacobus Henricus van't Hoff	Hoff, J. H. van't
Franck van den Wijngaert	Wijngaert, F. van den
Karel de Winter	Winter, K. de
Daisy ver Boven	Ver Boven, D.

ENGLISH. Enter under the prefix.

<u>APPEARS AS</u>:	<u>ENTER AS</u>:
Knig... v D'Anvers	D'Anvers, K.
Augus... Morgan	De Morgan, A.
Walter de la re	De la Mare, W.
Daphne Du Mau..	Du Maurier, D.
Richard Le Gallienne	Le Gallienne, R.
Martin Van Buren	Van Buren, M.
Wernher von Braun	Von Braun, W.

FLEMISH. See Dutch.

FRENCH. If the prefix consists of an article or of a contraction of an article and a preposition, enter under the prefix.

<u>APPEARS AS</u>:	<u>ENTER AS</u>:
Gustave le Rouge	Le Rouge, G.
Rene La Bruyere	La Bruyere, R.
Edelestand Pontas du Meril	Du Meril, E. P.
Charles-Marc des Granges	Des Granges, C.-M.

3. <u>Surnames with separately written prefixes</u> (cont.)

Otherwise, enter under the part of the name following the preposition.

APPEARS AS:	ENTER AS:
Theodore Agrippa d' Aubigne	Aubigne, T. A. d'
Alfred de Musset	Musset, A. de
Jean de la Fontaine	La Fontaine, J. de

GERMAN. If the prefix consists of an article or of a contraction of an article and a preposition, enter under the prefix.

APPEARS AS:	ENTER AS:
August am Thym	Am Thym, A.
Ernst aus'm Weerth	Aus'm Weerth, E.
Erich vom Ende	Vom Ende, E
Josef Paul zum Busch	Zum Busch, J. P.
Otto zur Linde	Zur Linde, O.

Otherwise, enter under the part of the name following the prefix.

APPEARS AS:	ENTER AS:
Johann Wolfgang von Goethe	Goethe, J. W. von
Georg Ludwig von und zu Urff	Urff, G. L. von und zu

Follow the same rule for German names of Dutch origin, but enter names of other foreign origin according to the rules for the language of the name.

APPEARS AS:	ENTER AS:
Hans Otto de Boor	De Boor, H. O.
(Name of Dutch origin with article as prefix)	
Paul ten Bruggencate	Ten Bruggencate, P.
(Name of Dutch origin with contraction as prefix)	
Emil du Bois-Reymond	Du Bois-Reymond, E.

3. <u>Surnames with separately written prefixes</u> (cont.)

   ITALIAN. Enter modern names under the prefix.

APPEARS AS:	ENTER AS:
Giovanni A Prato	A Prato, G.
Nicola D'Arienzo	D'Arienzo, N.
Lorenzo da Ponte	Da Ponte, L.
Pietro Maria de Amicis	De Amicis, P. M.
Isodoro del Lungo	Del Lungo, I.
Eufrosino della Volpaia	Della Volpaia, E.
Angelo di Costanzo	Di Costanzo, A.
Gioacchino li Greci	Li Greci, G.
Niccolo lo Savio	Lo Savio, N.

   NORWEGIAN. See Scandinavian languages.

   PORTUGUESE. Enter under the part of the name following the prefix.

APPEARS AS:	ENTER AS:
Martinho Augusto da Fonseca	Fonseca, M. A. da
Joao Adolpho dos Santos	Santos, J. A. dos
Vasile A Mariei	A Mariei, V.
Emil de Puscariu	Puscariu, E. de

   SCANDINAVIAN LANGUAGES. Enter under the part of the name following the prefix if the prefix is of Scandinavian or German origin (except for the Dutch de). If the prefix is the Dutch de or is a prefix of another origin, enter under the prefix.

APPEARS AS:	ENTER AS:
Gunnar Johannes af Hallstrom	Hallstrom, G. J. af
Carl von Linne	Linne, C. von
Gerard de Geer, friherre	De Geer, G., friherre
Mangus Gabriele de la Gardie, greve	De la Gardie, M. G., greve
Jens Lassen La Cour	La Cour, J. L.

   SPANISH. If the prefix consists of an article only, enter under it.

APPEARS AS:	ENTER AS:
Manuel Antonio Las Heras	Las Heras, M. A.

3. <u>Surnames with separately written prefixes</u> (cont.)

Enter all other names under the part following the prefix.

APPEARS AS:	ENTER AS:
Francisco de Figueroa	Figueroa, F. de
Bartolome de las Casas	Casas, B. de las
Antonio del Rio	Rio, A. del

SWEDISH. See Scandinavian languages.

Other prefixes. If the prefix is not an article, or preposition, or combination of the two, enter under the prefix.

APPEARS AS:	ENTER AS:
David FitzGerald	FitzGerald, D.
William MacDonald	MacDonald, W.

4. <u>Prefixes hyphenated or combined with surnames</u>

If the prefix is regularly or occasionally hyphenated or combined with the surname, enter the name under the prefix.

APPEARS AS:	ENTER AS:
Petros ter-Poghosian	Ter-Poghosian, P.
Guillaume Debure	Debure, G.
A. A. fon-Lampe	Fon-Lampe, A.A.

5. <u>Common prefixes</u>

Common prefixes are listed alphabetically. The treatment for each prefix is indicated in a 3-column format. See specific languages and language groups (above) for guidance on how to treat names originating in a language other than English.

<div align="center"><u>Common Prefixes</u></div>

<u>PREFIX:</u>	<u>APPEARS AS:</u>	<u>ENTER AS:</u>
A' or A	Thomas A'Beckett	A'Beckett, T.
	Giovanni A Prato	A Prato, G.

5. <u>Common prefixes</u> (cont.)

<u>PREFIX</u>:	<u>APPEARS AS</u>:	<u>ENTER AS</u>:
Abu	Abdul Abu Zarah	Abu Zarah, A.
af	Gunnar Johannes af Hallstrom	Hallstrom, G. J. af
Am	August am Thym	Am Thym, A.
Aus'm	Ernst aus'm Weerth	Aus'm Weerth, E.
d'	Knightley D'Anvers	D'Anvers, K.
	Nicolo D'Arienzo	D'Arienzo, N.
EXCEPT FRENCH:	Theodore Agrippa d'Aubigne	Aubigne, T. A. d'
da	Lorenzo da Ponte	Da Ponte, L.
EXCEPT PORTUGUESE:	Martinho Augusto da Fonseca	Fonseca, M. A. da

de

ENGLISH, GERMAN, ITALIAN

	Augustus de Morgan	De Morgan, A.
	Hans Otto de Boor	De Boor, H. O.
	Pietro Mario de Amicis	De Amicis, P. M.

FRENCH, BELGIAN, SPANISH, DUTCH, PORTUGESE

	Alfred de Musset	Musset, A. de
	Karel de Winter	Winter, K. de
	Francisco de Figueroa	Figueroa, F. de
	Emil de Puscariu	Puscariu, E. de

de la

ENGLISH, SCANDINAVIAN

	Walter de la Mare	De la Mare, W.
	Mangus Gabriele de la Gardie	Da la Gardie, M. G.

FRENCH (enter under la)

	Jean de la Fontaine	La Fontaine, J. de

DUTCH, SPANISH

	Jacob Baart de la Faille	Faille, J. B. de la
	Juan de la Cosa	Cosa, J. de la
de las	Bartolome de las Casas	Casas, B. de las

5. <u>Common prefixes</u> (cont.)

PREFIX:	APPEARS AS:	ENTER AS:
del		

<center>ITALIAN</center>

| | Isodoro del Lungo | Del Lungo, I. |

<center>SPANISH</center>

	Antonio del Rio	Rio, A. del
della	Eufrosino della Volpaia	Della Volpaia, E.
den	Ary den Hertog	Hertog, A. den
des	Charles-Marc des Granges	Des Granges, C.-M.
di	Angelo di Costanzo	Di Costanzo, A.
dos	Joao Adolpho dos Santos	Santos, J. A. dos
du	Emil du Bois-Reymond	Du Bois-Reymond, E.
	Thomas du Jardin	Du Jardin, T.
	Daphne Du Maurier	Du Maurier, D.
	Edelestand Pontas du Meril	Du Meril, E. P.
El-	M. M. El-Wakil	El-Wakil, M. M.

EXCEPT ARABIC: Enter after name

Fitz	David FitzGerald	FitzGerald, D.
Hadzi-	Josef Hadzi-Vasilevic	Hadzi-Vasilevic, J.
Ibn	Maurice Ibn al-Sherif	Ibn al-Sherif, M.
la	Rene La Bruyere	La Bruyere, R.
	Jens Lassen La Cour	La Cour, J. L.
las	Manuel Antonio Las Heras	Las Heras, M. A.
le	Gustave le Rouge	Le Rouge, G.
	Richard Le Gallienne	Le Gallienne, R.

EXCEPT DUTCH: Isaac le Long — Long, I. le

| li | Gioacchino li Greci | Li Greci, G. |

5. Common prefixes (cont.)

PREFIX:	APPEARS AS:	ENTER
lo	Niccolo lo Savio	Lo Savio, N.
pop	E. pop Dimitrov	Dimitrov, E. pop
Pop de	G. Pop de Basesti	Pop de Basesti, G.
Popa	G. Popa-Lisseanu	Popa-Lisseanu, G.
ten		

DUTCH (after name)

	Jan ten Brink	Brink, J. ten

GERMAN (enter prefix)

	Paul ten Bruggencate	Ten Bruggencate, P.
ter	Menno ter Braak	Braak, M. ter

UNLESS HYPHENATED: Petros ter-Poghosian   Ter-Poghosian, P.

van

ENGLISH (enter prefix)

	Martin Van Buren	Van Buren, M.

DUTCH, FLEMISH

	Albert van Driessche	Driessche, A. van
van den	Franck van den Wijngaert	Wijngaert, F. van den
van der	Pieter van der Aa	Aa, P. van der
van't	Jacobus Henricus van't Hoff	Hoff, J. H. van't
ver	Daisy ver Boven	Ver Boven, D.
vom	Erich vom Ende	Vom Ende, E.
von	Wernher von Braun	Von Braun, W.

EXCEPT GERMAN AND SCANDANAVIAN:

	Johann Wolfgang von Goethe	Goethe, J. W. von
	Carl von Linne	Linne, C. von
von der	Peter von der Muhll	Muhll, P. von der

5. <u>Common prefixes</u> (cont.)

PREFIX:	APPEARS AS:	ENTER AS:
von und zu	Georg Ludwig von und zu Urff	Urff, G. L. von und zu
zum	Josef Paul zum Busch	Zum Busch, J. P.
zur	Otto zur Linde	Zur Linde, O.

VERBALIZING FOR MACHINABILITY

The following symbols may be used in abstracts, annotations and titles:

. , ' : ' / * S ? ( ) − + = < > & ? .

(Arrows indicate upper and lower shift characters.)

The following symbols may be used in indexing terms:

. / ( ) -

ACCENTS/DIACRITICAL MARKS

Omit except in the following cases:

ä *is replaced by* ae
ö *is replaced by* oe
ü *is replaced by* ue
ø *is replaced by* oe
} *Germanic languages*

ANGSTROM UNITS (Å)

Use A

CHEMICALS

H_2SO_4 *use* H2SO4

→ *use* yields

See also PRIMES, SUBSCRIPTS, SUPERSCRIPTS

CUBIC

cm^3 *use* cu cm *or* cc
ft^3 *use* cu ft
m^3 *use* cu m

$\frac{1}{x^3}$ *or* x^{-3} } *use* 1/(x cubed)

See also EXPONENTS

DEGREES

Angles: 60°30'15" *use* 60 deg 30 min 15 sec

Latitude/Longitude: Add N, S, E, or W at end of expression.
60°30'15"N *use* 60 deg 30 min 15 sec see N

Temperautre: 60°C *use* 60C
60°F *use* 60F
60°K *use* 60K

DIACRITICAL MARKS

See ACCENTS/DIACRITICAL MARKS

EXPONENTS

$x^{(n-1)}$ *use* x to the (n-1)power
ft sec^{-1} *use* ft/sec
When the exponent is less than 7 and has
the base 10, write out the number, e.g.,
10^2 *use* 100
10^{-4} *use* 0.0001
2.75×10^{-3} *use* 0.00275
When the base is 10 and the exponent is 7
or more, write out; e.g.,
10^7 *use* 10 to the 7th power
10^{-9} *use* 10 to the minus 9th power

See also CUBIC, SQUARE, SUPERSCRIPTS

FRACTIONS

Use the slash (virgule) for the fraction bar;e.g.,

$x=\frac{a-b}{c}$ use x=(a-b)/c

$x=a \frac{b}{c}$ use x=a - (b/c)

GREATER THAN OR EQUAL TO (≥)

Use > or =

GREEK LETTERS

Use their names; e.g.,

α *use* alpha
β *use* beta
μ *use* mu, micro, *or* micron *as applicable*
π *use* pi

See also SPECIAL SYMBOLS

ITALICS

Do not use; see also UNDERSCORING

LESS THAN OR EQUAL TO (≤)

Use < or =

LOGARITHMS

$\log_{10}$ *use* log
$\log_e$ *use* ln (alpha "1" not digit "1")

MICRO- or MICROMICRO-

μl *use* microliters
μs *use* microsecs
μv *use* microvolts
μμf *use* micromicrofarads *or* picofarads

MICRONS

μ *use* micron(s) *when applicable*
mμ *use* millimicron(s)
μm *use* micrometer(s) *or* micron(s)
μμ *use* micromicron(s) *or* picometer(s)
um *use* micrometer(s) *or* micron(s) *when applicable*

PLUS OR MINUS (±)

Use + or -

PRIMES (')

Use repeating apostrophe
2,2',2" -terpyridyl *use* 2,2',2" -terpyridyl
a'''(a triple prime) *use* a ' ' '

QUOTATION MARKS (")

Use the apostrophe or single quote only.
Where quotation marks are conventionally used as a symbol,
abbreviate; e.g.,
    12" *use* 12 in.
    5"/54 cal guns *use* 5-in./54-cal guns
    45" *use* 45 sec
See also DEGREES, PRIMES

SPECIAL SYMBOLS

$\left.\begin{matrix}\approx\\=\\\approx\end{matrix}\right\}$ *use* approx.=

$\rightarrow\left\{\begin{matrix}use \text{ yields } (chemistry)\\use \text{ approaches limit of } (mathematics)\end{matrix}\right.$

$\vec{K}$ *use* K

    use number
∞   *use* infinity

$\lambda\left\{\begin{matrix}use \text{ wavelength } (electronics \text{ and } physics)\\use \text{ lambda } (all \text{ other})\end{matrix}\right.$

$\Omega\left\{\begin{matrix}use \text{ ohms } (electricity \text{ and } electronics)\\use \text{ omega } (all \text{ other})\end{matrix}\right.$

$\phi\left\{\begin{matrix}use \text{ phase } (electricity \text{ and } electronics)\\use \text{ phi } (all \text{ other})\end{matrix}\right.$

Similarly, spell out or show by acceptable alphanumeric characters
increment, varies as, therefore, differential of, variation of, integral,
sum, benzene ring, thunderstorm, male, female, fixed star, *etc.*

SQUARE

  cm^2 *use* sq cm
  ft^2 *use* sq ft
  m^2 *use* sq m

$\left.\begin{matrix}\frac{1}{x^2}\\x^{-2}\end{matrix}\right\}$ *use* 1/(x squared)

See also EXPONENTS

SQUARE ROOT

$\left.\begin{matrix}\sqrt{a\text{-}b}\\(a\text{-}b)^{1/2}\end{matrix}\right\}$ *use* square root of (a-b)

SUBSCRIPTS

P_H *use* P sub H
V_2 *use* V sub 2
B_5 *use* B *(omit the 5, which is the atomic*
number of boron)
C_{14} *use* C14 *if it is the isotope of carbon*
See also CHEMICALS, SUPERSCRIPTS

SUPERSCRIPTS

^{14}C *use* C14
H^+ *use* H(+)
SO_4^- *use* SO4(−)
V^{5+} *use* V (5+)
U^{234} *use* U234
B^{10} *use* B10
$O^{18}(p,n)N^{15}$ *use* O18(p,n)N15
d_{24}^{23} *use* density at 23 deg F referred to
water at 25 deg F
n_D^{20} *use* index of refraction for 20 deg F
and sodium light
See also CUBIC, EXPONENTS, SQUARE

UMLAUT see ACCENT

UNDERSCORING

Do not use underscoring .
    Escherichia coli *use* Escherichia coli

    quasar *use* quasar

Rules for Making Cross References To and From
Organization Name Headings

(Auth: E. J. Aronson Paper, 8/31/83)

Introduction

1. Cross references are designed to lead the user of a file of organization
    names from any name which the user happens to have seen to the format of
    the name used in the cataloging system. Cross references indicate a
    relationship between two corporate author headings.

2. There are two kinds of cross references used by CENDI cataloging agencies:

    a.) A see reference indicates an unacceptable form of heading:

        Example: Navy Dept., Washington, DC. See Department of the Navy,
                  Washington, DC.

        The existence of the reference is recorded on the preferred form of
        heading by an x (refer from) reference:

        Example: Department of the Navy, Washington, DC.
                      x Navy Dept., Washington, DC.

    This allows a user viewing the organization name file of acceptable forms
    to see which unacceptable forms have been accounted for.

    b.) A change in the name of a corporate author is covered by an sa (see
        also) reference which refers to the later names.

        Example: Clinton Labs., Oak Ridge, TN.
                      sa Clinton National Lab., Oak Ridge, TN.
                      sa Oak Ridge National Lab., TN.

                  Clinton National Lab., Oak Ridge, TN.
                      sa Oak Ridge National Lab., TN.
                      xx Clinton Labs., Oak Ridge, TN.

                  Oak Ridge National Lab., TN.
                      xx Clinton Labs., Oak Ridge, TN.
                      xx Clinton National Lab., Oak Ridge, TN.

        These references give the viewer/user a historical record of names
        used.

3. <u>Usual types of x-ref (refer from references)</u>

If the smaller part of the organizational name might appear on some other report without full identification, make an x-ref from the name of the smaller part.

    National Academy of Sciences-National Research Council, Washington,
      DC. Committee on Foods.
    x Committee on Foods (NAS-NRC), Washington, DC.

    Graz Univ. (Austria). Inst. fuer Theoretische Physik.
    x Institut fuer Theoretische Physik, Graz (Austria).

Note: x-refs are not usually necessary for faculties, departments, or laboratories or universities.

If there are two possible ways of writing a heading, make an x-ref from the one not chosen.

    Oklahoma Univ. Health Sciences Center, Oklahoma City.
     x Oklahoma Univ., Oklahoma City. Health Sciences Center.
    Ohio State Univ. Research Foundation, Columbus.
    x Ohio State Univ., Columbus. Research Foundation.

    Association of Bay Area Governments/Metropolitan Transportation
      Commission
    Joint Policy Committee, Berkeley, CA.
    x Joint Policy Committee (ABAG/MTC), Berkeley, CA.

    Technical Univ. of Denmark, Lyngby.
    x Danmarks Tekniske Hoejskole, Lyngby.
    x Den Polytekniske Laereanstalt, Lyngby (Denmark).

Make x-refs to show organization elements that have been omitted in the heading.

    Naval Research Lab., Washington, DC.
    x Department of the Navy, Washington, DC. Naval Research Lab.
    x Office of Naval Research, Washington, DC. Naval Research Lab.

    Air Force Aero Propulsion Lab., Wright-Patterson AFB, OH.
    x Air Force Systems Command, Wright-Patterson AFB, OH. AF Aero
       Propulsion Lab.

    Dow Corning Corp., Midland, MI. Resins and Chemicals Research Dept.
    x Dow Chemical Co., Midland, MI. Resins and Chemicals Research Dept.

    Geological Survey, Albany, NY. Water Resources Div.
    x Department of the Interior, Albany, NY. Water Resources Div.

3. <u>Usual types of x-ref (refer from references)</u> (cont.)

If one organizational level has a headquarters at a different location, include an x-ref from that location as well.

HRB-Singer, Inc., Rome, NY. Applied Sensing Lab.
x HRB-Singer, Inc., State College, PA. Applied Sensing Lab. (HRB HQ)
x Singer Co., New York. Applied Sensing Lab. (Singer HQ)
x Singer Co., Rome, NY. Applied Sensing Lab. (alternate form)

Make x-refs from acronyms and abbreviations.

Atomic Energy Commission, Washington, DC.
x AEC

If the heading is foreign, include the place name with the acronym.

Central Pulp and Paper Research Inst., New Delhi (India).
x CPPRI, New Delhi (India).

If a company has several forms of name, make an x-ref from the simplest or main form.

RCA Advanced Technology Labs., Camden, NJ.
x RCA Corp., Camden, NJ. Advanced Technology Labs.

Include an x-ref from an alternate form of the name which would file differently or might make trouble.

EPL Analysis, Olney, MD.
x E P L Analysis, Olney, MD.

Alphatech, Inc., Burlington, MA.
x ALPHATECH, Inc., Burlington, MA.

Federal Regional Council of New England, Augusta, ME.
x New England Federal Regional Council, Augusta, ME.

Brown (T.A.), Hershey, PA.
x Brown (Terence A.), Hershey, PA.

If an organization name changes, move the appropriate x-ref from the old to the new name.

Coastal Engineering Research Center, Fort Belvoir, VA.
xx Army Coastal Engineering Research Center, Washington, DC.
x CERC.   (moved from Army...)

3. <u>Usual types of x-ref (refer from references)</u> (cont.)

For DOD headings that do not begin with the words Air Force, Army, Defense, or Naval, add an appropriate x-ref.

> Department of the Air Force, Washington, DC.
> x Air Force Dept., Washington, DC.

> Eastern Space and Missile Center, Patrick AFB, FL.
> x Air Force Eastern Space and Missile Center, Patrick AFB, FL.

> Academy of Health Sciences (Army), Fort Sam Houston, TX.
> x Army Academy of Health Sciences, Fort Sam Houston, TX.

> Department of Defense Explosives Safety Board, Alexandria, VA.
> x Defense Explosives Safety Boad, Alexandria, VA.

> DOD Aircraft Ground Fire Suppression and Rescue Office,
> Wright-Patterson AFB, OH.
> x Defense Aircraft Ground Fire Suppression and Rescue Office,
>   Wright-Patterson AFB, OH.

> Naval Research Lab., Washington, DC. Shock and Vibration Information Center.
> x Defense Shock and Vibration Information Center, Washington, DC.

If a new heading includes a subelement, and the main heading requires one or more x-refs, make an additional heading for the main heading, even though it will not be used by itself; this will avoid complications in the x-ref structure. Thus, if a new heading is:

> Universidad Complutense de Madrid (Spain). Dept. de Metalurgia.

but upon investigation, it is discovered that this is the new name for Madrid Univ., set up a second heading reading:

> Universidad Complutense de Madrid (Spain).
> xx Madrid Univ. (Spain).

Government headings (except U.S.) should include a reference from the name or type of government. Foreign government names should include an x-ref from the name of the country, in either the name or adjectival form.

> Institute of Nuclear Energy Research, Lung-Tan (Taiwan).
> x Taiwan Inst. of Nuclear Energy Research, Lung Tan.

> Ministeriet for Groenland, Copenhagen (Denmark).
> x Danish Ministry for Greenland, Copenhagen.

3. <u>Usual types of x-ref (refer from references)</u> (cont.)

Department of Science and Technology, New Delhi (India).
 x Indian Dept. of Science and Technology, New Delhi.

Schweizerische Meteorologische Zentralanstalt, Zurich.
 x Swiss Central Inst. of Meteorology, Zurich.

For governments other than national, include an x-ref that indicates level of goverment.

x ... State...
x ... Municipal...
x ... City...
x ... County...
x ... Provincial...
x ... Territorial...

Michigan Dept. of Education, Lansing.
 x Michigan State Dept. of Education, Lansing.

Western Australia Dept. of Fisheries and Wildlife, Perth.
 x Western Australia State Dept. of Fisheries and Wildlife, Perth.

Ontario Ministry of the Environment, Toronto.
 x Ontario Provincial Ministry of the Environment, Toronto.

British Columbia Ministry of Health, Victoria.
 x British Columbia Provincial Ministry of Health, Victoria.

Each subelement requires a government x-ref.

Alabama State Dept. of Mental Health, Montgomery, Div. of Mental Illness.
 x Alabama State Div. of Mental Illness, Montgomery.

Michigan State Dept. of Social Services, Lansing. Adult Protective Services Div.
 x Michigan State Adult Protective Services Div., Lansing.

4. <u>Special problems with foreign headings</u>

Any foreign heading requires a notation in the place name file under the name of the city. The name of that city can be checked for validity and spelling in various reference books. For the name of an Australian, Canadian, German, Indian, or United Kingdom city, an extra x-ref is made for the city index file showing state, province, shire, or West-East.

4. <u>Special problems with foreign headings</u> (cont.)

When a British entry has two or three apparent place names, start at the end and work backward: the last name is either the shire or a large city, the name before that is the town, the name before that is the address. In the examples below, the place name is underlined.

> Safety in Mines Research Establishmen , Harpur Hill, <u>Puxton</u>, Derbyshire.

> Technology Reports Centre, Station Square, St. Mary Cray, <u>Orpington</u>, Kent.

In addition, foreign headings often present the problem of two different translations of the same heading. Make x-refs from each different version, either from a main heading form or from a subelement form.

> Akademiya Navuk BSSR, Minsk. Inst. Teplo- i Massoobmena
> x Akademiya Navuk BSSR, Minsk, Inst. of Heat and Mass Exchange.
> x Institut Teplo- i Massoobmena, Minsk (USSR).

> Eidgenoessische Technische Hockschule, Zurich (Switzerland).
> Versuchsanstalt fuer Wasserbau, Hydrologie und Glaziologie.
> x Eidgenoessische Technische Hochschule, Zurich (Swtzerland). Inst. for Hydraulic Research, Hydrology, and Glaciology.
> x Eidgenoessische Technische Hochschule, Zurich (Switzerland). Lab. for Hydraulic Research, Hydrology, and Glaciology.
> x Versuchsanstalt fuer Wasserbau, Hydrologie und Glaziologie, Zurich (Switzerland).

> Voronezhskii Lesotekhnicheskii Inst. (USSR).
> x Voronezh Forest-Technology Inst. (USSR).
> x Voronezh Forest Engineering Inst. (USSR).
> x Lesotekhnicheskii Inst., Voronezh (USSR).
> x Forestry and Wood Technology Inst., Voronezh (USSR).
> x Wood and Forestry Technology Inst., Voronezh (USSR).
> x Voronezh Wood Technology Inst. (USSR).

Do not make English x-refs from very ordinary names such as Institute of Biology,...

If an organization includes a personal name, include an x-ref from the name.

> Istituto di Metrologia Gustavo Colonnetti, Turin (Italy).
> x Gustavo Colonnetti Metrology Inst., Turin (Italy).
> x Colonnetti Metrology Inst., Turin (Italy).

4. <u>Special problems with foreign headings</u> (cont..)

   If an organization in the USS? is named in honor of ("imenyi") someone, omit the name from the heading, but include it in the x-refs. One x-ref should be in the "...im..." form, where the personal name appears in the genitive, and the other x-ref should be in English and start with the form of the personal name.

>   Dagestanskii Gosudarstvennyi Univ., Makhachkala (USSR).
>   x Dagestanskii Gosudarstvennyi Univ. <u>im V. I. Lenina</u>, Makhachkala (USSR).
>   x <u>Lenin</u> Dagestan State Univ., Makhachkala (USSR).

5. <u>Headings requiring special x-refs</u>

   Some headings require an extra x-ref in order to group similar items, or locate them as a pattern, or link them to other headings. These special cases are listed below.

   <u>AFB</u>

>   Warner Robins Air Logistics Center, Robins AFB, GA.
>   x Robins AFB, GA. Warner Robins Air Logistics Center.

   <u>Committees of Congress</u>

>   Committee on the Budget (U.S. House).
>   x Budget Committee (U.S. House).
>   x Committee of the Budget (U.S. House).
>   x Congress, Washington, DC. Committee on the Budget, U.S. House.
>   x House, Washington, DC. Committee on the Budget.

>   Committee on Environment and Public Works (U.S. Senate).
>   x Congress, Washington, DC. Committee on Environment and Public Works, U.S. Senate.
>   x Environment and Public Works Committee (U.S. Senate).
>   x Senate, Washington, DC. Committee on Environment and Public Works.

>   Committee on Finance (U.S. Senate). Subcommittee on Health.
>   x Congress, Washington, DC. Subcommittee on Health, U.S. Senate.
>   x Senate, Washington, DC. Subcommittee on Health.
>   x Subcommittee on Health (U.S. Senate).

>   Joint Committee on Reduction of Federal Expenditures (U.S. Congress).
>   x Congress, Washington, DC. Joint Committee on Reduction of Federal Expenditures.
>   x Committee on Reduction of Federal Expenditures (U.S. Congress).

5. <u>Headings requiring special x-refs</u> (cont.)

      x House, Washington, DC. Joint Committee on Reduction of Federal
        Expenditures.
      x Senate, Washington, DC. Joint Committee on Reduction of Federal
        Expenditures.

<u>Council of Governments</u>

    Larimer-Weld Regional Council of Governments. Loveland, CO.
    x COG, Loveland, CO.
    x Council of Governments, Loveland, CO.
    x Larimer County Regional Coun^'l of Governments, Loveland, CO.
    x Weld County Regional Counct' of Governments, Loveland, CO.

<u>Detachments</u>

    Weather Squ..:.c. (26th), Blitheville AFB, AR. Detachment 14.
    x Weather Squadron (26th). Detachment 14.
    x Blytl..ille AFB, AR. Detachment 14.

<u>Fort ...</u>

    Army Combat Developments Command, Fort Belvoir, VA.
    x Fort Belvoir, VA. Army Combat Developments Command.

<u>Geological surveys</u> (foreign)

    Geological Survey of Japan, Kawasaki.
    x Geological Survey, Kawasaki (Japan). (from place name)
    x Japan Geological Survey, Kawasaki. (from the country)

    Sveriges Geologiska Undersoekning, Uppsala.
    x Geological Survey of Sweden, Uppsala.
    x Geological Survey, Uppsala (Sweden).
    x Swedish Geological Survey, Uppsala.

<u>Hospitals</u>

    Ball Memorial Hospital, Muncie, IN.
    x Muncie Ball Memorial Hospital, IN. (starting with place name)

<u>Museums</u> (by place)

    Bernice P. Bishop Museum, Honolulu, HI.
    x Museum, Honolulu, HI.

    Australian Museum, Sydney.
    x Museum, Sydney (Australia)

5. Headings requir<u> special x-refs</u> (cont.)

<u>Museums</u> (by type)

Harvard Univ., Cambridge, MA. Museum of Comparative Zoology.
 x Museum of Comparative Zoology, Cambridge, MA.
 x Museum, Cambridge, MA.

American Museum of Natural History, New York.
 x Museum of Natural History, New York.
 x Museum, New York.

Museo Nacional de Historia Natural, Montevideo (Uruguay).
 x Museum, Montevideo (Uruguay).
 x Museum of Natural History, Montevideo (Uruguay).

Museum National d'Histoire Naturelle, Paris (France).
 x Museum, Paris (France).
 x Museum of Natural History, Paris (France).

Naturhistorisches Museum, Vienna (Austria).
 x Museum, Vienna (Austria).
 x Museum of Natural History, Vienna (Austria).

<u>National Forests</u>

Monongahela National Forest, Elkins, WV.
 x National Forest, Elkins, WV.
 x Forest Service, Elkins, WV. Monongahela National Forest.

<u>Observatories</u>

An x-ref is made either from the place name or from one of the types
listed: <u>Aerological</u> Observatory, <u>Astronomical</u> Observatory, <u>Astrophysical</u>
Observatory, <u>Auroral</u> Observatory, <u>Bird</u> Observatory, <u>Compass</u> Observatory,
<u>Geophysical</u> Observatory, <u>Gravimetric</u> Observatory, <u>Hydrometeorological</u>
Observatory, <u>Magnetic</u> Observatory, <u>Meteorological</u> Observatory, <u>National</u>
Observatory, <u>Naval</u> Observatory, <u>Radar</u> Observatory, <u>Radio</u> Observatory,
<u>Radio Astronomy</u> Observatory, <u>Royal</u> Observatory, <u>Seismological</u> Observatory,
<u>Solar</u> Observatory, <u>Urban</u> Observatory.

Lamont-Doherty Geological Observatory, Palisades, NY.
 x Geological Observatory, Palisades, NY.

Dallas Seismological Observatory, TX.
 x Seismological Observatory, Dallas, TX.

Osservatorio Astronomico, Trieste (Italy).
 x Astronomical Observatory, Trieste (Italy).

5. <u>Headings requiring special x-refs</u> (cont.)

Deutscher Wetterdienst, Hohenpeissenberg (Germany, F.R.).
Meteorologisches Observatorium.
 x Meteorological Observatory, Hohenpeissenberg (Germany, F.R.).

<u>State universities with specific names</u>

Ball State Univ., Muncie, IN.
 x Indiana State Univ., Muncie.

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